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Inventory of Health and Social Service Personnel, 1989

Alberta

HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE

5th Floor, Kensington Place
10011 – 109 Street
EDMONTON, Alberta T5J 3S8

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Foreword

91-00418/

The Alberta Health and Social Services Disciplines Committee is an interdepartmental body of senior officials representing the following government departments: Advanced Education, Career Development and Employment, Family and Social Services, Health, and the Professions and Occupations Bureau. The primary function of the Committee is to advise the provincial government on issues relating to health and social service personnel and training. To carry out this mandate, the Committee collects information and data through surveys and monitors workforce supply and demand through ongoing research activities.

The Committee recognizes the need to promote awareness of health and social service personnel concerns. With this in mind, the Committee disseminates workforce information to a number of institutions, organizations and the general public. **Inventory of Health and Social Service Personnel**, (previously titled "Health and Social Service Manpower in Alberta") an annual publication, provides a range of information on almost forty health and social service occupations in Alberta. The Committee is confident this publication continues to serve as a useful reference.

On behalf of the Alberta Health and Social Services Disciplines Committee, I wish to thank the staff of the professional associations, licensing boards, post-secondary institutions, and employing agencies for providing valuable data to us. Through their support and cooperation we are able to publish **Inventory of Health and Social Service Personnel, 1989**.

Elvin Christenson, F.C.A.
Chairman, Alberta Health and Social
Services Disciplines Committee

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Introduction

This is the twelfth annual publication on health and social service personnel in Alberta. The Alberta Health and Social Services Disciplines Committee produces this report for the purpose of making workforce information available to the public. The report contains information and statistical data on 38 human service occupations for the year ending December 31, 1989. Included are:

- functional definitions;
- information on professional associations/licensing bodies;
- legislation;
- educational programs, enrolments and graduates;
- data on practitioners by geographical location and community size;
- historical and comparative workforce figures.

Scope of Coverage

These are the thirty-eight human service occupations included in this report:

> audiologists/speech pathologists, biomedical engineers, child and youth care workers, chiropractors, combined laboratory and x-ray technicians, community health representatives, day care workers, dental assistants, dental hygienists, dental technicians, dentists, denturists, dietary technologists, dietitians/nutritionists, emergency medical technicians, health record administrators, health record technicians, medical laboratory technologists, medical radiation technologists, occupational hygiene technologists, occupational therapists, ophthalmic dispensers, optometrists, pharmacists, pharmacy assistants, physicians, physical therapists, podiatrists, prosthetists and orthotists, psychologists, public health inspectors, recreational therapists, registered nurses, registered nursing assistants, registered psychiatric nurses, rehabilitation practitioners, respiratory therapists, social workers.

The health care and social service sector contains numerous occupations. However, due to the constraints of time and other resources, it is not possible for all occupations to be reported in this publication. Two criteria have been used in the decision to include an occupation: legislative recognition and the existence of training programs. Only occupations with professional legislation and/or formal training programs in Alberta (or inter-provincial training agreements) are included.

As in previous reports, data on personnel is presented by geographic distribution. Census divisions are used for this purpose. As of 1986, the number of census divisions increased from 15 to 19 . As a result, census division data before and after 1986 are not comparable. In conjunction with this change, the boundaries of the Census Metropolitan Areas of Calgary and Edmonton increased to include a number of surrounding areas.[1] Workforce information for the two Census Metropolitan Areas is presented separately from their respective census divisions in order to provide a clearer picture of the urban and non-urban distribution of personnel. The map on the following page shows the census divisions and the major urban centres within each division.

In addition to the distribution of personnel by census divisions, the distribution of personnel by community size is also included for each occupation.

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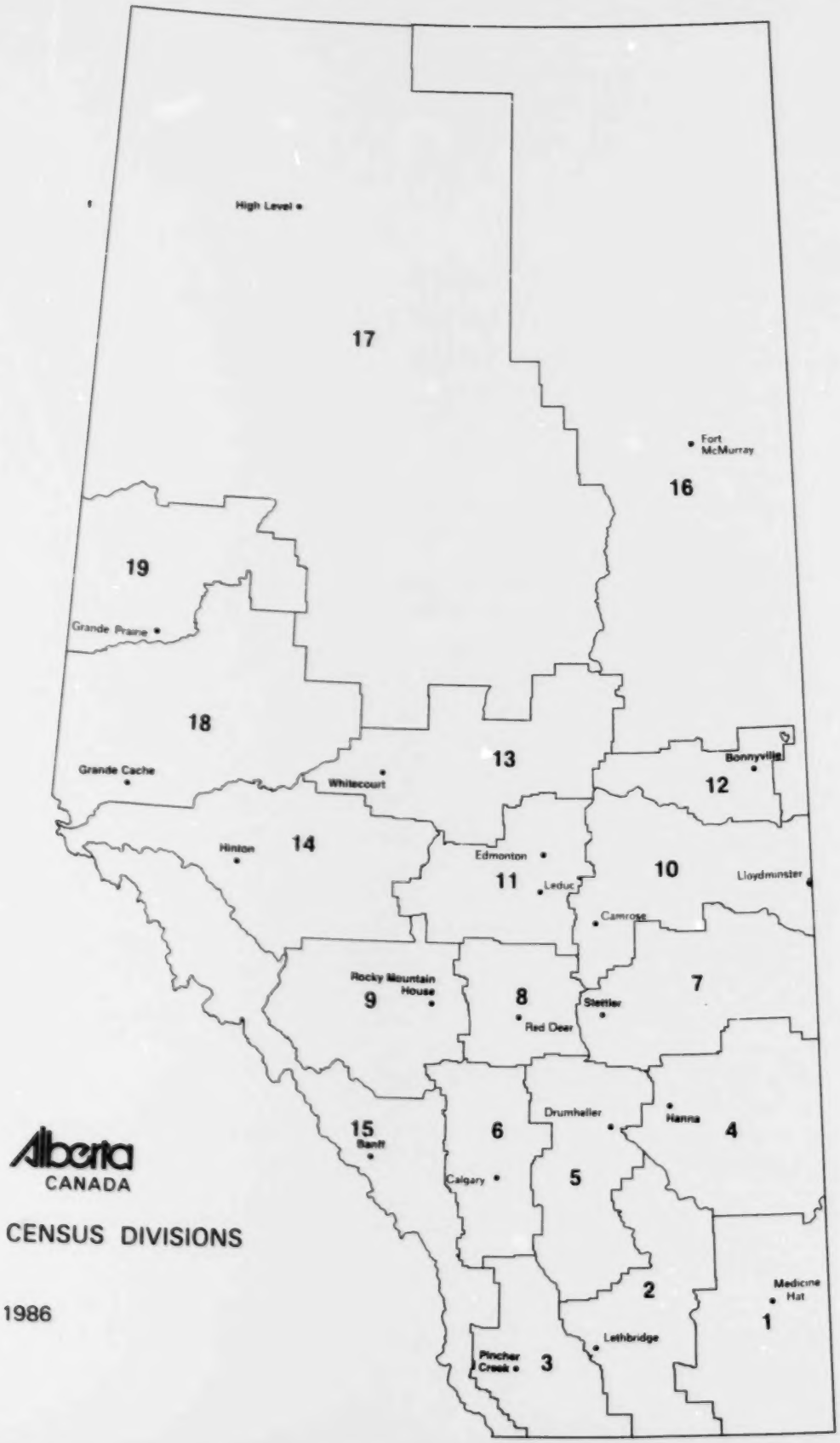
1 [The Census Metropolitan Area of Edmonton includes the cities of Edmonton, Fort Saskatchewan, Leduc, and St. Albert; the towns of Beaumont, Bon Accord, Calmar, Devon, Drayton Valley, Gibbons, Morinville, Redwater, Spruce Grove, and Stony Plain; the villages of Breton, Entwistle, Legal, New Sarepta, Thorsby, Wabamun, and Warburg; the summer villages of Betula Beach, Edmonton Beach, Golden Days, Itaska Beach, Kapasiwin, Lakeview, Point Alison, Seba Beach, and Sundance Beach; the municipal district of Sturgeon #90; and the counties of Leduc #25, Parkland #31, Strathcona #20; the Alexander #134 and Wabamun #133A Indian Reserves.] [The Census Metropolitan Area of Calgary includes the cities of Airdrie and Calgary; the towns of Cochrane and Crossfield; the villages of Beiseker and Irricana; the summer village of Chestermere Lake; the municipal district of Rocky View #44, and Sarcee Indian Reserve #145.]


High Level
17
Fort McMurray
16
19
Grande Prairie
18
Grande Cache
Whitecourt
13
Bonnyville
12
Hinton
14
Edmonton
11
Leduc
10
Lloydminster
Camrose
Rocky Mountain House
9
8
Red Deer
Stettler
7
Drumheller
Hanna
15
Banff
6
4
Calgary
5
2
Medicine Hat
1
Lethbridge
Pincher Creek
3
Alberta
CANADA
CENSUS DIVISIONS
1986

Information Sources

The principal sources of information and data contained in this report are:

1. The 1980 edition of the **Canadian Classification and Dictionary of Occupations**;
2. Current professional legislation;
3. Provincial professional associations or licensing bodies for health and social service occupational groups (two of the 38 groups have no professional association or licensing body);
4. Surveys of health and social service personnel working in Alberta conducted by the Alberta Health and Social Services Disciplines Committee;
5. Survey of health and social service education programs in Alberta conducted by Alberta Advanced Education;
6. Reports published by Health and Welfare Canada; and
7. Population estimates provided by the Alberta Bureau of Statistics, and Statistics Canada.

The definitions in the **Canadian Classification and Dictionary of Occupations** have been used for most disciplines in this publication. In some cases, definitions were obtained from professional statutes or other sources. Information on legislation was obtained from provincial statutes governing the professions.

About half of the workforce data appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. To obtain this information, a survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1989. For the remaining workforce groups, the survey of employers of health and social service personnel conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the data source.

Alberta Health and Social Service Education Programs Inventory December 1989 was the source of information on basic education programs contained in this publication. The inventory was compiled by Alberta Advanced Education through a survey of human services educational programs in Alberta's post-secondary institutions.

In order to put its workforce situation in a regional context, Alberta's personnel-to-population ratios for selected occupations were compared to those for Western Canada (Manitoba, Saskatchewan, Alberta and British Columbia combined) where similar information from these other jurisdictions was available. Health and Welfare Canada provided this information.

Data Limitations

Accuracy is considered of utmost importance in data collection. However, there can be deficiencies in the sources of information. Some of these limitations are:

1. Some professional association registries included retired, honorary or associate members who may not have full practice rights. Where possible, such members were excluded for the purpose of this publication.
2. The number of practitioners is likely to be underestimated for those occupational groups where registration is not mandatory in order to practise. For such groups, the survey of employers of health and social service personnel was used as the source of data. Workforce statistics from the survey of employers indicate the number of personnel practising at the time of the survey. The registration data from professional associations or registration bodies provide workforce data about the potential number of personnel in the province; the actual number practising is generally lower than the total registered.

3. The dates for the data will vary depending on the source. March 31 is the date of the annual employment survey. However, data from professional associations is based on the associations' membership year. For the majority of groups this date is December 31.

Workforce Situation in 1989

Since 1979, the Alberta Health and Social Services Disciplines Committee has conducted workforce surveys of employers of health and social service personnel in Alberta. Fourteen surveys have been completed since then, two annually from 1979 to 1981, and one in each year since 1982. The Committee's fourteenth employer survey was conducted on March 31, 1989. Data were sought on 134 occupations from 5,338 employers, with a response rate of 98.8 percent.

Based on the March 31, 1989 survey, there were 80,255 persons employed in the health and social service sector which represented 70,837 "full-time equivalent" established positions.[1] At the time of the survey, there were 3,839 vacant "full-time equivalent" positions, representing an average vacancy rate of 5.4 percent. There were 9,578 resignations during the period from April 1, 1988 to March 31, 1989, representing an average turnover rate of 14.0 percent during the 12-month period prior to the survey.

As of March 31, 1989 the occupational groups experiencing the highest vacancy rates were:

- Electroencephalographic Technologists 35.6%
- Physical Therapists 17.6%
- Respiratory Therapists 16.8%
- Dental Hygienists 16.2%
- Prosthetists/Orthotists 14.9%
- Occupational Therapists 13.8%
- Registered Nurses — Pediatric 11.9%
- Registered Nurses — Psychiatric 11.1%
- Registered Nurses — Medical/Surgical 10.9%
- Registered Nurses — Critical Care/Intensive Care 10.7%

The occupational groups with the highest turnover rates from April 1, 1988 to March 31, 1989 were:

- Day Care Workers 28.5%
- Child and Youth Care Workers (excluding day care) 27.2%
- Radiation Oncology Technologists 20.8%
- Recreational Therapists 20.8%
- Physical Therapists 19.4%
- Registered Nurses — General Duty 19.2%
- Nuclear Medicine Technologists 19.0%
- Rehabilitation Practitioners 19.0%
- Occupational Therapists 18.3%
- Recreational Therapy Assistants 18.3%

1 "Full-time equivalent" established positions were calculated by adding data on full-time employment and vacancies to data on part-time employment and vacancies which had first been converted to represent full-time employment.

Training of Health and Social Service Personnel

In 1988-89, Alberta had a total of 121 educational programs to train health and social service personnel. These training programs were found in 24 post-secondary educational institutions, hospitals, and cancer treatment centres in the province. In a few areas where there were no educational programs in the province, Alberta had inter-provincial training agreements with institutions outside the province.

Alberta Advanced Education, on behalf of the Alberta Health and Social Services Disciplines Committee, publishes annually a report entitled **Alberta Health and Social Service Education Programs Inventory**. The 1988-89 edition of this publication contains the following information on health and social service training programs in Alberta:

- Location and length of training programs;
- Number of applicants;
- First-year enrolment quotas;
- Actual enrolments; and
- Number of graduates.

Readers who wish to obtain more information in these areas should consult this publication.

Format of the Publication

The format of this report remains the same as previous editions. The 38 occupational groups are organized alphabetically by chapter. Each chapter contains sections on:

- The functional definition and statistical highlights of the occupational group;
- Professional association, licensing authority, and regulatory legislation;
- The number of personnel, their geographical distribution, historical and, if available, comparative workforce data; and
- Basic education programs.

There is a breakdown by specialty for three of the occupational groups: dentists, physicians, and registered nurses.

The table on pages 6 and 7 provides summary information for the 38 occupational groups.

Summary Information

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Audiologists and Speech Pathologists	353	1:6,864		2	32
Biomedical Engineers	16	1:151,438		3	3
Child and Youth Care Workers	1,825	1:1,328		3	82
Chiropractors	347	1:6,983	X	—	—
Combined Laboratory and X-Ray Technicians	366	1:6,620	X	1	14
Community Health Representatives	125	1:19,384		1	24
Day Care Workers	6,221	1:389		14	322[1]
Dental Assistants	2,168	1:1,118	X	3	159
Dental Hygienists	737	1:3,288	X	1	36
Dental Technicians	186	1:13,027	X	1	15
Dentists	1,285	1:1,886	X	1	45
Denturists	208	1:11,649	X	1	13
Dietary Technologists	279	1:8,685		2	44
Dietitians/ Nutritionists	401	1:6,042	X	3	41
Emergency Medical Technicians	1,311	1:1,848	X	4	228
Health Record Administrators	140	1:17,307		1	13
Health Record Technicians	355	1:6,825		1	17
Medical Laboratory Technologists	2,563	1:945		3	127
Medical Radiation Technologists	1,268	1:1,911	X	4	57
Occupational Hygiene Technologists	N/A	N/A		1	9
Occupational Therapists	423	1:5,728	X	2	79
Ophthalmic Dispensers	419	1:5,783	X	2	57
Optometrists	212	1:11,429	X	—	—
Pharmacists	2,152	1:1,126	X	1	103
Pharmacy Assistants	606	1:3,998		1	42
Physical Therapists	1,185	1:2,045	X	2	54

[1] Data on the number of graduates in the baccalaureate programs from the University of Alberta and the University of Lethbridge are not included due to unavailability.

Summary Information continued

	Number of Registered/ Practising Personnel	Personnel -to- Population Ratio	Legislation	Number of Training Programs	Number of Graduates
Physicians	4,206	1:576	X	2	172
Podiatrists	23	1:105,348	X	—	—
Prosthetists and Orthotists	29	1:83,552		—	—
Psychologists	1,165	1:2,080	X	10	140
Public Health Inspectors	116	1:20,888	X	—	—
Recreational Therapists	289	1:8,384		4	56
Registered Nurses	22,253	1:109	X	25[1]	1,227
Registered Nursing Assistants	6,005	1:403	X	2[2]	222
Registered Psychiatric Nurses	1,169	1:2,073	X	2	40
Rehabilitation Practitioners	1,465	1:1,654		9	173
Respiratory Therapists	566	1:4,281	X	2	60
Social Workers	2,905	1:834	X	7	358

1 Excluded from the total number of training programs are the refresher courses in nursing offered by ten institutions.

2 Excluded from the total number of training programs are the three post-basic courses, and the nursing assistant refresher program.

Audiologists and Speech Pathologists

I. Overview

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 444 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (SHAA) in 1989.[1] Of these, 325 had full practice rights, 92 were students and 31 were inactive or did not meet all membership requirements. However, registration is not compulsory for audiologists and speech pathologists. According to a survey of health and social service employers conducted by the Alberta Health and Social Services Disciplines Committee, there were 32 audiologists and 321 speech pathologists practising in Alberta in 1989.[2]

According to this survey, approximately 40 percent of these professionals were employed by local school boards and in schools for the handicapped. Another 30 percent worked in acute care hospitals and 23 percent were employed by health units.[3]

Seventy-eight percent of the audiologists and 67 percent of the speech pathologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial audiologist-to-population ratio was 1:75,719 and the provincial speech pathologist-to-population ratio was 1:7,548 in 1989.

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1 Source: Speech and Hearing Association of Alberta. Number of speech and hearing personnel registered with the SHAA as of October 31, 1989.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Speech and Hearing Association of Alberta
Box 86, Main Post Office
Edmonton, Alberta
T5J 2G9

President: Ms. Margaret Traboulsi
President Elect: Ms. Connie Alton

c) Legislation:

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING AUDIOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,154	—
2 (Lethbridge)	2	115,903	1:57,952
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	0	38,402	—
6 (Calgary excluding CMA)	0	47,611	—
7 (Stettler)	0	39,998	—
8 (Red Deer)	2	122,985	1:61,493
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	0	77,103	—
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	0	46,281	—
13 (Whitecourt)	0	55,957	—
14 (Hinton)	0	25,634	—
15 (Banff)	0	24,737	—
16 (Fort McMurray)	0	46,082	—
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	3	71,916	1:23,972
Census Metropolitan Area (CMA) of Calgary	12	702,270	1:58,523
Census Metropolitan Area (CMA) of Edmonton	13	803,730	1:61,825
PROVINCIAL TOTAL	**32**	**2,423,000**	**1:75,719**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING AUDIOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	12	702,270	1:58,523
Census Metropolitan Area (CMA) of Edmonton	13	803,730	1:61,825
10,000 to 69,999			
Camrose	0	12,950	—
Fort McMurray	0	33,700	—
Grande Prairie	2	27,210	1:13,605
Lethbridge	2	60,610	1:30,305
Medicine Hat	0	42,790	—
Red Deer	2	55,950	1:27,975
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	1	6,500	1:6,500
Ponoka	0	5,710	—
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	0	539,320	—
PROVINCIAL TOTAL	**32**	**2,423,000**	**1:75,719**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 1C
GEOGRAPHIC DISTRIBUTION OF PRACTISING SPEECH PATHOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	57,154	1:5,715
2 (Lethbridge)	15	115,903	1:7,727
3 (Pincher Creek)	5	36,307	1:7,261
4 (Hanna)	2	12,269	1:6,135
5 (Drumheller)	3	38,402	1:12,801
6 (Calgary excluding CMA)	5	47,611	1:9,522
7 (Stettler)	2	39,998	1:19,999
8 (Red Deer)	23	122,985	1:5,347
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	6	77,103	1:12,851
11 (Edmonton excluding CMA)	2	19,464	1:9,732
12 (Bonnyville)	4	46,281	1:11,570
13 (Whitecourt)	4	55,957	1:13,989
14 (Hinton)	1	25,634	1:25,634
15 (Banff)	2	24,737	1:12,369
16 (Fort McMurray)	5	46,082	1:9,216
17 (High Level)	4	49,473	1:12,368
18 (Grande Cache)	3	13,466	1:4,489
19 (Grande Prairie)	9	71,916	1:7,991
Census Metropolitan Area (CMA) of Calgary	90	702,270	1:7,803
Census Metropolitan Area (CMA) of Edmonton	126	803,730	1:6,379
PROVINCIAL TOTAL	**321**	**2,423,000**	**1:7,548**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1D
COMMUNITY BREAKDOWN OF PRACTISING SPEECH PATHOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	90	702,270	1:7,803
Census Metropolitan Area (CMA) of Edmonton	126	803,730	1:6,379
10,000 to 69,999			
Camrose	3	12,950	1:4,317
Fort McMurray	4	33,700	1:8,425
Grande Prairie	6	27,210	1:4,535
Lethbridge	9	60,610	1:6,734
Medicine Hat	10	42,790	1:4,279
Red Deer	18	55,950	1:3,108
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	3	9,180	1:3,060
Crowsnest Pass	0	6,480	—
Drumheller	2	6,670	1:3,335
Edson	1	7,370	1:7,370
High River	2	5,330	1:2,665
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	1	9,620	1:9,620
Okotoks	1	6,020	1:6,020
Olds	0	5,070	—
Peace River	2	6,500	1:3,250
Ponoka	3	5,710	1:1,903
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	2	4,890	1:2,445
Stettler	1	4,990	1:4,990
Taber	1	6,270	1:6,270
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	33	539,320	1:16,343
PROVINCIAL TOTAL	**321**	**2,423,000**	**1:7,548**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	346	332	353
% Change in Number of Practising Personnel	4.8%	–4.0%	6.3%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratio: – Alberta	1:6,872	1:7,195	1:6,864

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

There is a four-year baccalaureate degree in speech pathology offered at the University of Alberta. The program produced 32 graduates in 1988-89. This program includes courses in speech pathology and audiology. However, graduates from the program only qualify as speech pathologists. Audiologists require training at the graduate level.

A master's program in speech pathology was introduced in 1986-87 at the University of Alberta.

TABLE 3
EDUCATIONAL PROGRAMS FOR
AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1986-87	1987-88	1988-89
A. BACCALAUREATE PROGRAM			
University of Alberta			
Bachelor of Science in Speech Pathology			
(Program Length: 4 years)			
Enrolments:			
1st Year	Pre Professional Year		
2nd Year	35	35	37
3rd Year	35	34	36
4th Year	31	36	30
Graduates:	30	36	32
B. MASTER'S PROGRAM			
University of Alberta			
Master of Science in Speech Pathology[2]			
(Program Length: 2 years plus thesis)			
Enrolments:			
1st Year	3	3	8
2nd Year	—	3	—
Graduates:	—	2	—

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 The master's program commenced in 1986-87.

Biomedical Engineers

I. Overview

Definition: Biomedical engineering involves the application of engineering principles to living systems. It can involve the adaptation of equipment used in conjunction with living organisms (usually human beings), include life systems modelling and simulation, and involve the design and development of medical devices and equipment for underwater and space missions.[1]

(Source: "Careers in Biomedical Engineering and Technology in Canada," Canadian Medical and Biological Engineering Society, Ottawa, Ontario.)

There were 16 biomedical engineers who resided in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1989.[2] Biomedical engineers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 88 percent of the total. The provincial biomedical engineer-to-population ratio was 1:151,438 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Certification is not mandatory but may be obtained from:

The Canadian Board of Examiners for
Clinical Engineering Certification
C.M.B.E.S. Secretariat
c/o National Research Council
Room 302, Building M-50
Ottawa, Ontario
K1A 0R8

b) Professional Association:

Canadian Medical and Biological Engineering Society
c/o National Research Council
Room 305, Building M-50
Ottawa, Ontario
K1A 0R8

President: Dr. Robert Kearney

c) Legislation:

There is no legislation regulating biomedical engineers in Alberta at present.

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1 The term, "biomedical engineer," is often used much more loosely to cover physicists, computing scientists, and other specialists and technicians, working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this broader interpretation is used.

2 Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1989.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,154	—
2 (Lethbridge)	0	115,903	—
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	0	38,402	—
6 (Calgary excluding CMA)	0	47,611	—
7 (Stettler)	0	39,998	—
8 (Red Deer)	1	122,985	1:122,985
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	0	77,103	—
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	0	46,281	—
13 (Whitecourt)	0	55,957	—
14 (Hinton)	0	25,634	—
15 (Banff)	0	24,737	—
16 (Fort McMurray)	1	46,082	1:46,082
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	0	71,916	—
Census Metropolitan Area (CMA) of Calgary	2	702,270	1:351,135
Census Metropolitan Area (CMA) of Edmonton	12	803,730	1:66,978
PROVINCIAL TOTAL	**16**	**2,423,000**	**1:151,438**

1 Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED BIOMEDICAL ENGINEERS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	2	702,270	1:351,135
Census Metropolitan Area (CMA) of Edmonton	12	803,730	1:66,978
10,000 to 69,999			
Camrose	0	12,950	—
Fort McMurray	1	33,700	1:33,700
Grande Prairie	0	27,210	—
Lethbridge	0	60,610	—
Medicine Hat	0	42,790	—
Red Deer	1	55,950	1:55,950
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	0	5,710	—
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	0	539,320	—
PROVINCIAL TOTAL	**16**	**2,423,000**	**1:151,438**

1 Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	17	17	16
% Change in Number of Registered Personnel	0.0%	0.0%	-5.9%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratio:			
– Alberta	1:139,865	1:140,512	1:151,438
– Western Canada[3]	—	1:115,911	—

1 Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31 of the year indicated.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: Ratios for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1988**. Ottawa, Ontario: Department of National Health and Welfare, March 1990.

IV. Educational Programs

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. In addition, master's and doctoral degree programs are available to students registered in the engineering or science faculties but carrying out their research in the Faculty of Medicine. In 1988-89, two students graduated from the master's programs and one from the doctoral program.

TABLE 3
EDUCATIONAL PROGRAMS FOR
BIOMEDICAL ENGINEERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. MASTER'S PROGRAMS			
University of Alberta Master's of Science or Engineering offered by the Faculty of Engineering (Program Length: variable)			
Enrolments:	1	4	6
Graduates:	1	2	2
University of Alberta Master's of Science offered by the Department of Applied Sciences in Medicine (Program Length: variable)			
Enrolments:	1	8	1
Graduates:	0	0	0
PROVINCIAL TOTAL Number of M.Sc. and M.Eng. Programs: 2			
Graduates:	1	2	2
B. DOCTORAL PROGRAM University of Alberta (Program Length: variable)			
Enrolments:	4	5	9
Graduates:	1	0	1

[1] Source: Department of Applied Sciences in Medicine and Department of Electrical Engineering, University of Alberta, Edmonton, May 1990.

Child and Youth Care Workers

I. Overview

Definition: Provide care and counselling to children, youth and their families. The child or youth with emotional and/or behavioural problems is often the main focus of attention. The worker establishes a relationship with the child or youth and engages him in activities planned to teach competence and responsibility. Child and youth care includes the following tasks: shape the child or youth's environment to support his development of skills; manage a child or youth's maladaptive behaviour; mediate between children, youth and their families as appropriate; assess and communicate the progress of children and youth; provide individual and group activities in a living or community setting; teach living skills and independent skills. Settings include the family home, school, residential facilities, group homes, hospitals, foster homes and community environments.

(Source: Alberta Family and Social Services)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

There were 1,825[1] child and youth care workers practising in Alberta in 1989.[2] Those employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of the total. The provincial child care worker-to-population ratio was 1:1,328 in 1989. Since child care workers primarily work with children and adolescents, the adjusted provincial child care worker-to-population (5-17 years) ratio was 1:258 in 1989.[3]

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Child Care Workers' Association of Alberta
P.O. Box 11360
Edmonton, Alberta
T5J 3K6

President: Mr. Eric Brown

c) Legislation:

There is no legislation regulating child and youth care workers in Alberta at present.

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1 Included in the total (1,825) were hospital child care workers (34) and houseparents (154) which were excluded in previous years.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Estimate of (5-17) year old population based on a total Alberta population estimate of 2,423,000 as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING CHILD AND YOUTH CARE WORKERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	47	57,154	1:1,216
2 (Lethbridge)	80	115,903	1:1,449
3 (Pincher Creek)	11	36,307	1:3,301
4 (Hanna)	0	12,269	—
5 (Drumheller)	43	38,402	1:893
6 (Calgary excluding CMA)	30	47,611	1:1,587
7 (Stettler)	14	39,998	1:2,857
8 (Red Deer)	91	122,985	1:1,351
9 (Rocky Mountain House)	4	16,258	1:4,065
10 (Camrose)	32	77,103	1:2,409
11 (Edmonton excluding CMA)	20	19,464	1:973
12 (Bonnyville)	28	46,281	1:1,653
13 (Whitecourt)	5	55,957	1:11,191
14 (Hinton)	3	25,634	1:8,545
15 (Banff)	8	24,737	1:3,092
16 (Fort McMurray)	63	46,082	1:731
17 (High Level)	59	49,473	1:839
18 (Grande Cache)	2	13,466	1:6,733
19 (Grande Prairie)	44	71,916	1:1,634
Census Metropolitan Area (CMA) of Calgary	689	702,270	1:1,019
Census Metropolitan Area (CMA) of Edmonton	552	803,730	1:1,456
PROVINCIAL TOTAL	**1,825**	**2,423,000**	**1:1,328**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING CHILD AND YOUTH CARE WORKERS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	689	702,270	1:1,019
Census Metropolitan Area (CMA) of Edmonton	552	803,730	1:1,456
10,000 to 69,999			
Camrose	18	12,950	1:719
Fort McMurray	32	33,700	1:1,053
Grande Prairie	11	27,210	1:2,474
Lethbridge	73	60,610	1:830
Medicine Hat	47	42,790	1:910
Red Deer	74	55,950	1:756
Wetaskiwin	14	10,480	1:749
5,000 to 9,999			
Bonnyville	2	5,470	1:2,735
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	13	5,330	1:410
Hinton	3	9,890	1:3,297
Innisfail	4	5,650	1:1,413
Lacombe	6	6,190	1:1,032
Lloydminster	6	9,620	1:1,603
Okotoks	0	6,020	—
Olds	5	5,070	1:1,014
Peace River	0	6,500	—
Ponoka	0	5,710	—
Rocky Mountain House	4	5,340	1:1,335
Slave Lake	16	5,800	1:363
St. Paul	0	4,890	—
Stettler	1	4,990	1:4,990
Taber	0	6,270	—
Vegreville	1	4,990	1:4,990
Whitecourt	3	6,560	1:2,187
Under 5,000	251	539,320	1:2,149
PROVINCIAL TOTAL	**1,825**	**2,423,000**	**1:1,328**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR CHILD AND YOUTH CARE WORKERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	1,428	1,576	1,825
% Change in Number of Practising Personnel	8.8%	10.4%	N/A
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratio:			
– Alberta	1:1,665	1:1,516	1:1,328

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

Grant MacEwan Community College, Lethbridge Community College, and Mount Royal College each offer a two-year child and youth care worker diploma program. The three programs produced 82 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
CHILD AND YOUTH CARE WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
CHILD AND YOUTH CARE WORKER DIPLOMA			
Grant MacEwan Community College			
(Program Length: 2 years)			
Enrolments:			
1st Year	72	66	57
2nd Year	47	40	29
Graduates:	39	41	30
Lethbridge Community College			
(Program Length: 2 years)			
Enrolments:			
1st Year	33	30	32
2nd Year	16	17	18
Graduates:	15	12	12
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st Year	51	63	47
2nd Year	31	43	57
Graduates:	17	23	40
PROVINCIAL TOTAL			
Number of Training Programs: 3			
Graduates:	71	76	82

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Chiropractors

I. Overview

Definition: A chiropractor practises within the branch of the healing arts concerned with the restoration and maintenance of human health by the chiropractic adjustment or manipulation of the spinal column and other articulations of the body and includes the use of x-ray and other analytical instruments, therapies and diagnostic procedures.

(Source: The Chiropractic Profession Act, S.A. 1984, Ch. C9.1)

There were 378 chiropractors who registered with the College of Chiropractors of Alberta (CCA) in 1989. Of these, 347 were active members residing in Alberta, 21 were practising in another jurisdiction and ten were retired.[1] Fifty-eight percent of active chiropractors in Alberta were located in the Census Metropolitan Areas of Calgary and Edmonton. The provincial chiropractor-to-population ratio was 1:6,983 in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

College of Chiropractors of Alberta
516, 10235 – 101 Street
Edmonton, Alberta
T5J 3G1

President: Dr. Jim Bortolotto

b) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practise as chiropractors must register on an annual basis with the College of Chiropractors of Alberta (CCA).

The CCA is responsible for registration, maintaining professional discipline and practice review. The Universities Coordinating Council has the authority to approve faculties of chiropractic and determine equivalencies for registration purposes.

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1 Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA as of December 31, 1989.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED CHIROPRACTORS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	57,154	1:5,196
2 (Lethbridge)	27	115,903	1:4,293
3 (Pincher Creek)	5	36,307	1:7,261
4 (Hanna)	2	12,269	1:6,134
5 (Drumheller)	6	38,402	1:6,400
6 (Calgary excluding CMA)	9	47,611	1:5,290
7 (Stettler)	6	39,998	1:6,666
8 (Red Deer)	29	122,985	1:4,241
9 (Rocky Mountain House)	3	16,258	1:5,419
10 (Camrose)	14	77,103	1:5,507
11 (Edmonton excluding CMA)	4	19,464	1:4,886
12 (Bonnyville)	4	46,281	1:11,570
13 (Whitecourt)	6	55,957	1:9,326
14 (Hinton)	4	25,634	1:6,408
15 (Banff)	2	24,737	1:12,368
16 (Fort McMurray)	2	46,082	1:23,041
17 (High Level)	1	49,473	1:49,473
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	10	71,916	1:7,192
Census Metropolitan Area (CMA) of Calgary	105	702,270	1:6,688
Census Metropolitan Area (CMA) of Edmonton	97	803,730	1:8,286
PROVINCIAL TOTAL	**347**	**2,423,000**	**1:6,983**

1 Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31, 1989. Excludes inactive, honorary, and retired members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED CHIROPRACTORS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	105	702,270	1:6,688
Census Metropolitan Area (CMA) of Edmonton	97	803,730	1:8,286
10,000 to 69,999			
Camrose	5	12,950	1:2,590
Fort McMurray	2	33,700	1:16,850
Grande Prairie	6	27,210	1:4,535
Lethbridge	17	60,610	1:3,565
Medicine Hat	11	42,790	1:3,890
Red Deer	16	55,950	1:3,497
Wetaskiwin	4	10,480	1:2,620
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	5	9,180	1:1,836
Crowsnest Pass	0	6,480	—
Drumheller	2	6,670	1:3,335
Edson	2	7,370	1:3,685
High River	2	5,330	1:2,665
Hinton	2	9,890	1:4,945
Innisfail	4	5,650	1:1,413
Lacombe	4	6,190	1:1,548
Lloydminster	4	9,620	1:2,405
Okotoks	1	6,020	1:6,020
Olds	2	5,070	1:2,535
Peace River	2	6,500	1:3,250
Ponoka	2	5,710	1:2,855
Rocky Mountain House	3	5,340	1:1,780
Slave Lake	0	5,800	—
St. Paul	2	4,890	1:2,445
Stettler	3	4,990	1:1,663
Taber	4	6,270	1:1,568
Vegreville	3	4,990	1:1,663
Whitecourt	2	6,560	1:3,280
Under 5,000	34	539,320	1:15,862
PROVINCIAL TOTAL	**347**	**2,423,000**	**1:6,983**

1 Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31, 1989. Excludes inactive, honorary, and retired members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	312	328	347
% Change in Number of Registered Personnel	–1.3%	5.1%	5.8%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:7,621	1:7,283	1:6,983

IV. Educational Programs

In Canada, chiropractic training can be obtained at the Canadian Memorial Chiropractic College in Toronto which offers a four-year program. Many of Alberta's chiropractors received their chiropractic training in the United States.

1 Source: College of Chiropractors of Alberta. Number of chiropractors registered with the CCA and residing in Alberta as of December 31 of the year indicated. Excludes inactive, honorary, and retired members.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

Combined Laboratory and X-Ray Technicians

I. Overview

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant employing both a laboratory technologist and an x-ray technician.

(Source: **Saskatchewan Health Manpower Annual Report 1976**. Regina, Saskatchewan: Saskatchewan Health, 1976)

Although the Combined Laboratory and X-Ray Technicians Committee has been responsible for registration since January 1989, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

There were 366 combined laboratory and x-ray technicians practising in Alberta in 1989. Fifty percent of these individuals were employed in acute care hospitals having less than 300 beds. Another 43 percent were employed in medical laboratories and radiological facilities.[1] Approximately 39 percent were employed in the Census Metropolitan Areas of Calgary and Edmonton even though in urban centres, medical laboratory and radiation services are usually provided by medical laboratory technologists and medical radiation technologists (see chapters on Medical Laboratory Technologists and Medical Radiation Technologists). The provincial personnel-to-population ratio was 1:6,620 in 1989.

[1] Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Combined Laboratory and X-Ray Technicians Committee
c/o Professions and Occupations Bureau
5th Floor, 10011 — 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Ms. Audrey Funk

b) Professional Association:

Alberta Association of Combined
Laboratory and X-Ray Technicians
c/o 370 Terrace Plaza
4445 Calgary Trail South
Edmonton, Alberta
T6H 5R7

President: Ms. Audrey Funk

c) Legislation:

Regulations under the Health Disciplines Act for combined laboratory and x-ray technicians became effective January 1, 1989. These regulations set out the educational and/or employment requirements for registration under the Act. In addition, the types of service and conditions of practice are specified in regulation. The Combined Laboratory and X-Ray Technicians Committee and the Health Disciplines Board are responsible for registration and discipline of practitioners. The titles "combined laboratory x-ray technician" or "certified combined technician" and the initials "CLXT" are reserved by regulation for registered members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING
COMBINED LABORATORY AND X-RAY TECHNICIANS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	57,154	1:19,051
2 (Lethbridge)	12	115,903	1:9,659
3 (Pincher Creek)	6	36,307	1:6,051
4 (Hanna)	10	12,269	1:1,227
5 (Drumheller)	9	38,402	1:4,267
6 (Calgary excluding CMA)	11	47,611	1:4,328
7 (Stettler)	24	39,998	1:1,667
8 (Red Deer)	36	122,985	1:3,416
9 (Rocky Mountain House)	6	16,258	1:2,710
10 (Camrose)	28	77,103	1:2,754
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	12	46,281	1:3,857
13 (Whitecourt)	21	55,957	1:2,665
14 (Hinton)	10	25,634	1:2,563
15 (Banff)	10	24,737	1:2,474
16 (Fort McMurray)	3	46,082	1:15,361
17 (High Level)	12	49,473	1:4,123
18 (Grande Cache)	3	13,466	1:4,489
19 (Grande Prairie)	9	71,916	1:7,991
Census Metropolitan Area (CMA) of Calgary	41	702,270	1:17,129
Census Metropolitan Area (CMA) of Edmonton	100	803,730	1:8,037
PROVINCIAL TOTAL	**366**	**2,423,000**	**1:6,620**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 – Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING COMBINED LABORATORY AND X-RAY TECHNICIANS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	41	702,270	1:17,129
Census Metropolitan Area (CMA) of Edmonton	100	803,730	1:8,037
10,000 to 69,999			
Camrose	1	12,950	1:12,950
Fort McMurray	1	33,700	1:33,700
Grande Prairie	2	27,210	1:13,605
Lethbridge	1	60,610	1:60,610
Medicine Hat	0	42,790	—
Red Deer	12	55,950	1:4,663
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	3	5,470	1:1,823
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	1	6,670	1:6,670
Edson	3	7,370	1:2,457
High River	0	5,330	—
Hinton	6	9,890	1:1,648
Innisfail	3	5,650	1:1,883
Lacombe	2	6,190	1:3,095
Lloydminster	4	9,620	1:2,405
Okotoks	2	6,020	1:3,010
Olds	3	5,070	1:1,690
Peace River	0	6,500	—
Ponoka	7	5,710	1:816
Rocky Mountain House	6	5,340	1:890
Slave Lake	2	5,800	1:2,900
St. Paul	0	4,890	—
Stettler	1	4,990	1:4,990
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	1	6,560	1:6,560
Under 5,000	164	539,320	1:3,289
PROVINCIAL TOTAL	**366**	**2,423,000**	**1:6,620**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	311	306	366
% Change in Number of Practising Personnel	5.1%	–1.6%	19.6%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:7,645	1:7,806	1:7,320

IV. Educational Programs

The Northern Alberta Institute of Technology offers a one-year combined laboratory and x-ray technology certificate program. The program produced 14 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[3]

	1986–87	1987–88	1988–89
CERTIFICATE IN COMBINED LABORATORY AND X-RAY TECHNOLOGY			
Northern Alberta Institute of Technology			
(Program Length: 1 year + 6 months practicum)			
Enrolments:	23	21	16
Graduates:	15	12	14

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Community Health Representatives

I. Overview

Definition: Provide health education and advice primarily to native communities.

(Source: Employer Survey Questionnaire: Alberta Health and Social Services Disciplines Committee, 1989).

As of October 4, 1989 there were 64 registered members with the Community Health Representative Association.[1] Since registration with the association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

According to the survey, 125 community health representatives were practising in the province in 1989.[2] Community health representatives in the Census Metropolitan Areas of Calgary and Edmonton accounted for only nine percent of the total. The provincial personnel-to-population ratio was 1:19,384 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Community Health Representative Association
c/o Alberta Indian Health Care Commission
1390 First Edmonton Place
10665 Jasper Avenue
Edmonton, Alberta
T5J 3S9

President: Ms. Cherrilene Steinhauer

c) Legislation:

None.

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1 Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of October 4, 1989.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING COMMUNITY HEALTH REPRESENTATIVES, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,154	—
2 (Lethbridge)	0	115,903	—
3 (Pincher Creek)	6	36,307	1:6,051
4 (Hanna)	0	12,269	—
5 (Drumheller)	4	38,402	1:9,601
6 (Calgary excluding CMA)	1	47,611	1:47,611
7 (Stettler)	0	39,998	—
8 (Red Deer)	5	122,985	1:24,597
9 (Rocky Mountain House)	2	16,258	1:8,129
10 (Camrose)	0	77,103	—
11 (Edmonton excluding CMA)	1	19,464	1:19,464
12 (Bonnyville)	17	46,281	1:2,722
13 (Whitecourt)	2	55,957	1:27,979
14 (Hinton)	0	25,634	—
15 (Banff)	1	24,737	1:24,737
16 (Fort McMurray)	40	46,082	1:1,152
17 (High Level)	29	49,473	1:1,706
18 (Grande Cache)	2	13,466	1:6,733
19 (Grande Prairie)	4	71,916	1:17,979
Census Metropolitan Area (CMA) of Calgary	4	702,270	1:175,568
Census Metropolitan Area (CMA) of Edmonton	7	803,730	1:114,819
PROVINCIAL TOTAL	**125**	**2,423,000**	**1:19,384**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING COMMUNITY HEALTH REPRESENTATIVES, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	4	702,270	1:175,568
Census Metropolitan Area (CMA) of Edmonton	7	803,730	1:114,819
10,000 to 69,999			
Camrose	0	12,950	—
Fort McMurray	4	33,700	1:8,425
Grande Prairie	0	27,210	—
Lethbridge	0	60,610	—
Medicine Hat	0	42,790	—
Red Deer	0	55,950	—
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	5	5,470	1:1,094
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	2	6,500	1:3,250
Ponoka	0	5,710	—
Rocky Mountain House	2	5,340	1:2,670
Slave Lake	0	5,800	—
St. Paul	1	4,890	1:4,890
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	100	539,320	1:5,393
PROVINCIAL TOTAL	**125**	**2,423,000**	**1:19,384**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising or Registered Personnel	40[1]	97[2]	125[1]
% Change in Number of Practising or Registered Personnel	N/A	N/A	N/A
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:59,443	1:24,626	1:19,384

IV. Educational Programs

The Alberta Vocational Centre in Lac La Biche offers a nine-month certificate program in community health work. The program produced 24 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR COMMUNITY HEALTH REPRESENTATIVES IN ALBERTA[4]

	1986–87	1987–88	1988–89
COMMUNITY HEALTH WORKER CERTIFICATE			
Alberta Vocational Centre, Lac La Biche (Program Length: 30 weeks)			
Enrolments:	25	24	31
Graduates:	15	15	24

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Community Health Representative Association of Alberta. Number of community health representatives registered with the Association and residing in Alberta as of December 31, 1988.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

4 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Day Care Workers

I. Overview

Definition: Supervise rest periods, play activities, developmental exercises, feeding and hygiene of preschool children at a day care centre.

Greet children and help them to settle into the physical environment. Feed infants and supervise meals and snacks for older children. Diaper infants and direct/assist older children in the use of toilets and personal hygiene. Organize and supervise groups of children in activities such as games, storytelling, arts and crafts and playground exercises. Spend time with individual children, entering into conversation, encouraging self- expression, and promoting inquisitiveness and self- direction. Maintain positive attitude and consistent behaviour, and show loving care. In keeping with practices acceptable to recognized standards and parent's expectations, administer required medications, contact parents when child is ill, and guide a child's behaviour in a manner which preserves and enhances self-esteem and reinforces socially acceptable conduct. Supervise rest and naptimes. Report concerns about a child and a child's developmental progress to the parent and/or supervisor-in-charge. Attend meetings and workshops as required.

(Source: Alberta Family and Social Services)

The survey of health and social service personnel working in Alberta conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee was used as the source of workforce information.

The survey found that there were 6,221[1] day care workers practising in Alberta in 1989.[2] Day care workers employed in the Census Metropolitan areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial day care worker-to-population ratio was 1:389 in 1989.

Since day care workers work with children, the adjusted provincial day care worker-to-population (0-5 years) ratio was 1:39 in 1989.[3]

II. Professional Association and Legislation Information

a) Licensing, Registration or Certification Authority:

None

b) Professional Association:

There is no one association which is recognized as representing all day care workers.

c) Legislation:

There is no legislation regulating day care workers in Alberta at present.

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1 Directors of day cares are included in the total number of day care workers.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Source: Estimate of (0-5) year old population based on a total Alberta population estimate of 2,423,000 as of June 1, 1989. Alberta Bureau of Statistics, 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING DAY CARE WORKERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Personnel-to-Population[2]	Population Ratio
1 (Medicine Hat)	79	57,154	1:723
2 (Lethbridge)	212	115,903	1:547
3 (Pincher Creek)	34	36,307	1:1,068
4 (Hanna)	14	12,269	1:876
5 (Drumheller)	72	38,402	1:533
6 (Calgary excluding CMA)	100	47,611	1:476
7 (Stettler)	28	39,998	1:1,429
8 (Red Deer)	245	122,985	1:502
9 (Rocky Mountain House)	27	16,258	1:602
10 (Camrose)	96	77,103	1:803
11 (Edmonton excluding CMA)	33	19,464	1:590
12 (Bonnyville)	57	46,281	1:812
13 (Whitecourt)	44	55,957	1:1,272
14 (Hinton)	8	25,634	1:3,204
15 (Banff)	57	24,737	1:434
16 (Fort McMurray)	72	46,082	1:640
17 (High Level)	64	49,473	1:773
18 (Grande Cache)	28	13,466	1:481
19 (Grande Prairie)	83	71,916	1:866
Census Metropolitan Area (CMA) of Calgary	2,104	702,270	1:334
Census Metropolitan Area (CMA) of Edmonton	2,764	803,730	1:291
PROVINCIAL TOTAL	**6,221**	**2,423,000**	**1:389**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DAY CARE WORKERS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	2,104	702,270	1:334
Census Metropolitan Area (CMA) of Edmonton	2,764	803,730	1:291
10,000 to 69,999			
Camrose	23	12,950	1:563
Fort McMurray	53	33,700	1:636
Grande Prairie	37	27,210	1:735
Lethbridge	160	60,610	1:379
Medicine Hat	61	42,790	1:701
Red Deer	178	55,950	1:314
Wetaskiwin	14	10,480	1:749
5,000 to 9,999			
Bonnyville	8	5,470	1:684
Brooks	25	9,180	1:367
Crowsnest Pass	7	6,480	1:926
Drumheller	17	6,670	1:392
Edson	0	7,370	—
High River	32	5,330	1:167
Hinton	8	9,890	1:1,236
Innisfail	3	5,650	1:1,883
Lacombe	20	6,190	1:310
Lloydminster	38	9,620	1:253
Okotoks	22	6,020	1:274
Olds	29	5,070	1:175
Peace River	9	6,500	1:722
Ponoka	8	5,710	1:714
Rocky Mountain House	27	5,340	1:198
Slave Lake	23	5,800	1:252
St. Paul	31	4,890	1:158
Stettler	13	4,990	1:384
Taber	13	6,270	1:482
Vegreville	0	4,990	—
Whitecourt	13	6,560	1:505
Under 5,000	481	539,320	1:1,121
PROVINCIAL TOTAL	**6,221**	**2,423,000**	**1:389**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR DAY CARE WORKERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	—	5,776	6,221
% Change in Number of Practising Personnel	—	—	7.7%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratio:			
– Alberta	—	1:414	1:389

IV. Educational Programs

Training in early childhood development is offered in one-year certificate programs, two-year diploma programs and a four-year baccalaureate program.

Certificate programs are offered at Alberta Vocational Centre — Lac La Biche, Keyano College, Lakeland College, Lethbridge Community College, Medicine Hat College, Mount Royal College and Red Deer College; diploma programs are offered at Grande Prairie Regional College, Grant MacEwan Community College, Mount Royal College, and Red Deer College. Baccalaureate-level training is available as a specialization in early childhood education through the Faculty of Education at the University of Alberta, the University of Calgary, and the University of Lethbridge.

In 1988-89, there were 154 certificate graduates and 133 diploma graduates from the various programs offered in the province. In the baccalaureate program the University of Calgary enrolled 101 students and granted degrees to 35 students.[3] Data on enrolments and graduates from the University of Alberta and the University of Lethbridge are presently unavailable.

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1 Source: **Health and Social Services Personnel Working in Alberta**, March 31, 1988 and 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **The University of Calgary Fact Book 1989-90**, Office of Institutional Analysis. The University of Calgary.

TABLE 3
EDUCATIONAL PROGRAMS FOR DAY CARE WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. CERTIFICATE PROGRAMS IN EARLY CHILDHOOD DEVELOPMENT			
Alberta Vocational Centre — Lac La Biche (Program Length: 36 weeks)			
Enrolments:	14	13	9
Graduates:	9	11	4
Grande Prairie Regional College[2] (Program Length: 1 Year)			
Enrolments:[3]	258	293	286
Graduates:	—	—	2
Keyano College (Program Length: 1 Year)			
Enrolments:	68	42	57
Graduates:	14	16	13
Lakeland College (Program Length: 1 Year)			
Enrolments:[4]	25	143	28
Graduates:	23	26	26
Lethbridge Community College (Program Length: 1 Year)			
Enrolments:[4]	347	499	428
Graduates:	20	20	12
Medicine Hat College (Program Length: 1 Year)			
Enrolments:	29	23	28
Graduates:	18	17	14
Mount Royal College (Program Length: 1 year)			
Enrolments:[3]	115	132	137
Graduates:	34	37	29

1 Source: **Alberta Health and Social Service Education Programs Inventory.** Edmonton, Alberta: Department of Advanced Education. December 1989.

2 Certificate program is no longer offered.

3 Enrolment figures include both students registered in the certificate program and students registered in the diploma program.

4 Enrolment figures include part-time registrations and may include enrolment data for distance education courses or evening classes.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR DAY CARE WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
Red Deer College			
(Program Length: 1 Year)			
Enrolments:[2]	135	144	124
Graduates:	62	43	54
PROVINCIAL TOTAL			
Number of Certificate Programs: 7			
Graduates:	180	170	154
B. DIPLOMA PROGRAMS IN EARLY CHILDHOOD DEVELOPMENT			
Grande Prairie Regional College			
(Program Length: 2 years)			
Enrolments:			
1st Year[2]	258	293	286
2nd Year	14	18	58
Graduates:	14	17	17
Grant MacEwan Community College			
(Program Length: 2 years)			
Enrolments:[3]			
1st Year	566	528	582
2nd Year	85	93	66
Graduates:	73	49	56
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st Year[2]	115	132	137
2nd Year	41	34	42
Graduates:	29	20	32

1 Source: **Alberta Health and Social Service Education Programs Inventory.** Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Enrolment figures include both students registered in the certificate program and students registered in the diploma program.

3 Enrolment figures may include part-time students and those in off-campus locations.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR DAY CARE WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
Red Deer College			
(Program Length: 2 Years)			
Enrolments:			
1st Year[2]	135	144	124
2nd Year	44	36	56
Graduates:	32	19	28
PROVINCIAL TOTAL			
Number of Diploma Programs: 4			
Graduates:	119	105	133

1 Source: **Alberta Health and Social Service Education Programs Inventory.** Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Enrolment figures include both students registered in the certificate program and students registered in the diploma program.

Dental Assistants

I. Overview

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of August 31, 1989 there were 2,192 certified and non-certified members of the Alberta Dental Assistants Association. Of these, 1,865 were certified and resided in Alberta.[1] Since registration is voluntary, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

According to the survey, 2,168 dental assistants were practising in the province in 1989.[2] Ninety-three percent of these individuals were employed in dentists' offices.[3] Dental assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 71 percent of the total. The provincial dental assistant-to-population ratio was 1:1,118 in 1989.

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1 Source: Alberta Dental Assistants Association. Number of dental assistants registered with the Association as of August 31, 1989.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Certification Body:

Alberta Dental Assistants Association
42 Beacon Crescent
St. Albert, Alberta
T8N 0A3

Executive Director/Registrar: Ms. Melanie Bachand
President: Ms. Dorothy McNish
President Elect: Ms. Moira Cookshaw

b) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dentists, two dental hygienists, and two dental assistants. The representatives are appointed by their respective professional associations. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, titles, conditions of practice, and standards of conduct and competency for dental assistants. Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association. Current regulations set out the duties which may be performed by certified dental assistants. A new statute to regulate this discipline is expected to be proclaimed in 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL ASSISTANTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	37	57,154	1:1,545
2 (Lethbridge)	87	115,903	1:1,332
3 (Pincher Creek)	20	36,307	1:1,815
4 (Hanna)	9	12,269	1:1,363
5 (Drumheller)	28	38,402	1:1,372
6 (Calgary excluding CMA)	25	47,611	1:1,904
7 (Stettler)	24	39,998	1:1,667
8 (Red Deer)	91	122,985	1:1,351
9 (Rocky Mountain House)	8	16,258	1:2,032
10 (Camrose)	44	77,103	1:1,752
11 (Edmonton excluding CMA)	13	19,464	1:1,497
12 (Bonnyville)	55	46,281	1:841
13 (Whitecourt)	27	55,957	1:2,072
14 (Hinton)	16	25,634	1:1,602
15 (Banff)	19	24,737	1:1,302
16 (Fort McMurray)	38	46,082	1:1,213
17 (High Level)	14	49,473	1:3,534
18 (Grande Cache)	13	13,466	1:1,036
19 (Grande Prairie)	56	71,916	1:1,284
Census Metropolitan Area (CMA) of Calgary	676	702,270	1:1,039
Census Metropolitan Area (CMA) of Edmonton	868	803,730	1:926
PROVINCIAL TOTAL	**2,168**	**2,423,000**	**1:1,118**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DENTAL ASSISTANTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	676	702,270	1:1,039
Census Metropolitan Area (CMA) of Edmonton	868	803,730	1:926
10,000 to 69,999			
Camrose	13	12,950	1:996
Fort McMurray	34	33,700	1:991
Grande Prairie	32	27,210	1:850
Lethbridge	62	60,610	1:978
Medicine Hat	36	42,790	1:1,189
Red Deer	67	55,950	1:835
Wetaskiwin	12	10,480	1:873
5,000 to 9,999			
Bonnyville	9	5,470	1:608
Brooks	7	9,180	1:1,311
Crowsnest Pass	6	6,480	1:1,080
Drumheller	7	6,670	1:953
Edson	7	7,370	1:1,053
High River	8	5,330	1:666
Hinton	9	9,890	1:1,099
Innisfail	8	5,650	1:706
Lacombe	6	6,190	1:1,032
Lloydminster	9	9,620	1:1,069
Okotoks	5	6,020	1:1,204
Olds	6	5,070	1:845
Peace River	13	6,500	1:500
Ponoka	8	5,710	1:714
Rocky Mountain House	8	5,340	1:668
Slave Lake	5	5,800	1:1,160
St. Paul	13	4,890	1:376
Stettler	10	4,990	1:499
Taber	3	6,270	1:2,090
Vegreville	8	4,990	1:624
Whitecourt	0	6,560	—
Under 5,000	213	539,320	1:2,532
PROVINCIAL TOTAL	**2,168**	**2,423,000**	**1:1,118**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	2,032	2,090	2,168
% Change in Number of Practising Personnel	2.5%	2.9%	3.7%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:1,170	1:1,143	1:1,118

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer dental assisting certificate programs. The two programs produced 107 graduates in 1988-89. In addition, the Northern Alberta Institute of Technology offers a correspondence training program. This program, which is 24 months in length and is designed for dental assistants presently employed, had 116 students and 52 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
DENTAL ASSISTANTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
DENTAL ASSISTING CERTIFICATE			
Northern Alberta Institute of Technology			
(Program Length: 41 weeks)			
Enrolments:	74	72	74
Graduates:	69	70	68
Correspondence Program			
(Program Length: 24 months)			
Enrolments	280	130	116
Graduates:	42	59	52
Southern Alberta Institute of Technology			
(Program Length: 39 weeks)			
Enrolments:	48	48	48
Graduates:	44	42	39
PROVINCIAL TOTAL			
Number of Training Programs: 3			
Graduates:	155	171	159

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Dental Hygienists

I. Overview

Definition: Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings, and remove sutures as permitted by training and by provincial legislation.[1]

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

As of October 31, 1989 there were 441 dental hygienists registered with the Alberta Dental Hygienists Association. Since registration is voluntary, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

According to the survey, 737 dental hygienists were practising in the province in 1989.[2] Eighty-five percent of these individuals were employed in dentists' offices and 10 percent were employed in health units.[3] Dental hygienists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 76 percent of the total. The provincial dental hygienist-to-population ratio was 1:3,288 in 1989.

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1 Alberta legislation does not permit dental hygienists to engage in activities described in the last sentence.

2 Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dental Hygienists' Association
9602 – 86 Street
Edmonton, Alberta
T6C 3E9

President: Ms. Noreen Wassill

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two dentists, two dental hygienists, and two dental assistants. The representatives are appointed by their respective professional associations. This group recommends regulations to the Board of the Alberta Dental Association regarding the duties, titles, conditions of practice, and standards of conduct and competency for dental hygienists.

In order to practise in the province, dental hygienists must be graduates of the Dental Hygiene program at the University of Alberta. Graduates from other training programs, must be certified by the Universities Coordinating Council in order to be registered.

Although registration and licensure are not mandatory at present, regulations currently in effect set our the qualification requirements for practice in Alberta. A new statute to regulate this discipline is expected to be proclaimed in 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING DENTAL HYGIENISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	15	57,154	1:3,810
2 (Lethbridge)	16	115,903	1:7,244
3 (Pincher Creek)	2	36,307	1:18,154
4 (Hanna)	4	12,269	1:3,067
5 (Drumheller)	6	38,402	1:6,400
6 (Calgary excluding CMA)	9	47,611	1:5,290
7 (Stettler)	3	39,998	1:13,333
8 (Red Deer)	40	122,985	1:3,075
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	15	77,103	1:5,140
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	12	46,281	1:3,857
13 (Whitecourt)	6	55,957	1:9,326
14 (Hinton)	7	25,634	1:3,662
15 (Banff)	5	24,737	1:4,947
16 (Fort McMurray)	17	46,082	1:2,711
17 (High Level)	8	49,473	1:6,184
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	11	71,916	1:6,538
Census Metropolitan Area (CMA) of Calgary	271	702,270	1:2,591
Census Metropolitan Area (CMA) of Edmonton	287	803,730	1:2,800
PROVINCIAL TOTAL	**737**	**2,423,000**	**1:3,288**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DENTAL HYGIENISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	271	702,270	1:2,591
Census Metropolitan Area (CMA) of Edmonton	287	803,730	1:2,800
10,000 to 69,999			
Camrose	8	12,950	1:1,619
Fort McMurray	17	33,700	1:1,982
Grande Prairie	8	27,210	1:3,401
Lethbridge	7	60,610	1:8,659
Medicine Hat	15	42,790	1:2,853
Red Deer	33	55,950	1:1,695
Wetaskiwin	3	10,480	1:3,493
5,000 to 9,999			
Bonnyville	3	5,470	1:1,823
Brooks	5	9,180	1:1,836
Crowsnest Pass	0	6,480	—
Drumheller	2	6,670	1:3,335
Edson	2	7,370	1:3,685
High River	4	5,330	1:1,333
Hinton	5	9,890	1:1,978
Innisfail	1	5,650	1:5,650
Lacombe	3	6,190	1:2,063
Lloydminster	2	9,620	1:4,810
Okotoks	1	6,020	1:6,020
Olds	2	5,070	1:2,535
Peace River	1	6,500	1:6,500
Ponoka	3	5,710	1:1,903
Rocky Mountain House	0	5,340	—
Slave Lake	1	5,800	1:5,800
St. Paul	3	4,890	1:1,630
Stettler	3	4,990	1:1,663
Taber	1	6,270	1:6,270
Vegreville	2	4,990	1:2,495
Whitecourt	0	6,560	—
Under 5,000	44	539,320	1:12,257
PROVINCIAL TOTAL	**737**	**2,423,000**	**1:3,288**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
DENTAL HYGIENISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	645	709	737
% Change in Number of Practising Personnel	7.3%	9.9%	3.9%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:3,686	1:3,369	1:3,288

IV. Educational Programs

The University of Alberta offers a two-year dental hygiene diploma program. The program produced 36 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR
DENTAL HYGIENISTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
DENTAL HYGIENE DIPLOMA			
University of Alberta			
(Program Length: 2 years)			
Enrolments:			
1st Year	43	43	43
2nd Year	39	37	36
Graduates:	39	37	36

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Dental Technicians

I. Overview

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980).

There were 186 dental technicians who resided in Alberta and registered with the Dental Technicians Board in 1989.[1] Dental technicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 88 percent of the total. Dentists in rural areas of the province contract some of their dental laboratory work to dental technicians in the major cities.

The provincial dental technician-to-population ratio was 1:13,027 in 1989. Some of the services performed by dental technicians, such as the making of complete dentures, can also be provided by denturists (see chapter on Denturists).

1 Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1989. Number includes dental technicians who were also denturists.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Mr. James Campbell

b) Professional Association:

Alberta Dental Technicians Association
Suite 300, Centre 104
5241 Calgary Trail
Edmonton, Alberta
T6H 5G8

President: Mr. Gary Fedoretz

c) Legislation:

Under the authority of the Dental Technicians Act, any individual who carries on a business as a dental technician must register with the Dental Technicians Board, a provincial government licensing body. The Dental Technicians Board is responsible for maintaining professional discipline and setting the educational qualifications required for registration. The titles "dental technician" and "registered dental technician" are reserved under the Act for registered members. A new statute to regulate this discipline is expected to be proclaimed in 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	57,154	1:19,051
2 (Lethbridge)	9	115,903	1:12,878
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	0	38,402	—
6 (Calgary excluding CMA)	1	47,611	1:47,611
7 (Stettler)	0	39,998	—
8 (Red Deer)	3	122,985	1:40,995
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	2	77,103	1:38,552
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	1	46,281	1:46,281
13 (Whitecourt)	1	55,957	1:55,957
14 (Hinton)	0	25,634	—
15 (Banff)	0	24,737	—
16 (Fort McMurray)	0	46,082	—
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	3	71,916	1:23,972
Census Metropolitan Area (CMA) of Calgary	65	702,270	1:10,804
Census Metropolitan Area (CMA) of Edmonton	98	803,730	1:8,201
PROVINCIAL TOTAL	**186**	**2,423,000**	**1:13,027**

1 Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1989. Number includes dental technicians who were also denturists.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTAL TECHNICIANS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	65	702,270	1:10,804
Census Metropolitan Area (CMA) of Edmonton	98	803,730	1:8,201
10,000 to 69,999			
Camrose	2	12,950	1:6,475
Fort McMurray	0	33,700	—
Grande Prairie	3	27,210	1:9,070
Lethbridge	9	60,610	1:6,734
Medicine Hat	3	42,790	1:14,263
Red Deer	2	55,950	1:27,975
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	0	5,710	—
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	3	539,320	1:179,773
PROVINCIAL TOTAL	**186**	**2,423,000**	**1:13,027**

1 Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31, 1989. Number includes dental technicians who were also denturists.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
DENTAL TECHNICIANS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	177	186	186
% Change in Number of Registered Personnel	5.4%	5.1%	0%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:13,433	1:12,842	1:13,027

IV. Educational Programs

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, one of which is in Alberta, or a two-year dental laboratory technology diploma plus three years of practical experience.

A two-year dental laboratory technology diploma program is offered at the Northern Alberta Institute of Technology (NAIT). The program produced 15 graduates in 1988-89. In 1989, six additional dental technicians met the certification requirements of the Board.

TABLE 3
EDUCATIONAL PROGRAM FOR
DENTAL TECHNICIANS IN ALBERTA[3]

	1986–87	1987–88	1988–89
DENTAL LABORATORY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	15	17	16
Graduates:	15	18	15

1 Source: Dental Technicians Board, Alberta Professions and Occupations Bureau. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of December 31 of the indicated year. Number includes dental technicians who were also denturists.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Dentists

I. Overview

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth, and includes oral surgery.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,285 dentists who resided in Alberta and registered with the Alberta Dental Association (ADA) in 1989. Of these dentists, 88 percent were general practitioners and 12 percent were specialists.[1] The number of dentists by specialty is shown in Table 4 of this chapter. Approximately 70 percent of the dentists were graduates of the University of Alberta Faculty of Dentistry, 22 percent were graduates of dental training programs in other Canadian provinces, and eight percent were graduates of schools of dentistry in other countries.[2]

Dentists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 75 percent of the total. The provincial dentist-to- population ratio was 1:1,886 in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Board:

Alberta Dental Association
101, 8230 – 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director, Registrar: Dr. B. P. Martinello
President: Dr. W. G. Mabey
President Elect: Dr. G. D. Harle

b) Legislation:

Under the authority of the Dental Profession Act, all individuals who wish to practise as dentists must register with the Alberta Dental Association.

Besides registration functions, the ADA is responsible for regulating the conduct of its members and for practice review. The Dental Profession Act sets the educational qualifications required for registration with the ADA. Post-basic educational qualifications required for registration as a dental specialist are also set in regulation. The Universities Coordinating Council is responsible for the certification of specialists. The professional association also has the authority to prescribe continuing education programs which must be completed by members in order to qualify for re-registration.

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1 Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	21	57,154	1:2,722
2 (Lethbridge)	49	115,903	1:2,365
3 (Pincher Creek)	14	36,307	1:2,593
4 (Hanna)	3	12,269	1:4,090
5 (Drumheller)	10	38,402	1:3,840
6 (Calgary excluding CMA)	16	47,611	1:2,976
7 (Stettler)	10	39,998	1:4,000
8 (Red Deer)	60	122,985	1:2,050
9 (Rocky Mountain House)	3	16,258	1:5,419
10 (Camrose)	23	77,103	1:3,352
11 (Edmonton excluding CMA)	4	19,464	1:4,866
12 (Bonnyville)	20	46,281	1:2,314
13 (Whitecourt)	16	55,957	1:3,497
14 (Hinton)	10	25,634	1:2,563
15 (Banff)	11	24,737	1:2,249
16 (Fort McMurray)	17	46,082	1:2,711
17 (High Level)	5	49,473	1:9,895
18 (Grande Cache)	4	13,466	1:3,367
19 (Grande Prairie)	21	71,916	1:3,425
Census Metropolitan Area (CMA) of Calgary	438	702,270	1:1,603
Census Metropolitan Area (CMA) of Edmonton	530	803,730	1:1,516
PROVINCIAL TOTAL	**1,285**	**2,423,000**	**1:1,886**

1 Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	438	702,270	1:1,603
Census Metropolitan Area (CMA) of Edmonton	530	803,730	1:1,516
10,000 to 69,999			
Camrose	7	12,950	1:1,850
Fort McMurray	15	33,700	1:2,247
Grande Prairie	14	27,210	1:1,944
Lethbridge	35	60,610	1:1,732
Medicine Hat	20	42,790	1:2,140
Red Deer	48	55,950	1:1,166
Wetaskiwin	4	10,480	1:2,620
5,000 to 9,999			
Bonnyville	4	5,470	1:1,368
Brooks	4	9,180	1:2,295
Crowsnest Pass	1	6,480	1:6,480
Drumheller	3	6,670	1:2,223
Edson	4	7,370	1:1,843
High River	3	5,330	1:1,777
Hinton	6	9,890	1:1,648
Innisfail	3	5,650	1:1,883
Lacombe	5	6,190	1:1,238
Lloydminster	6	9,620	1:1,603
Okotoks	4	6,020	1:1,505
Olds	2	5,070	1:2,535
Peace River	4	6,500	1:1,625
Ponoka	3	5,710	1:1,903
Rocky Mountain House	3	5,340	1:1,780
Slave Lake	0	5,800	—
St. Paul	5	4,890	1:978
Stettler	3	4,990	1:1,663
Taber	3	6,270	1:2,090
Vegreville	4	4,990	1:1,248
Whitecourt	3	6,560	1:2,187
Under 5,000	101	539,320	1:5,340
PROVINCIAL TOTAL	**1,285**	**2,423,000**	**1:1,886**

1 Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR DENTISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	1,276	1,258	1,285
% Change in Number of Registered Personnel	4.2%	−1.4%	2.1%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratio: – Alberta	1:1,863	1:1,899	1:1,886

1 Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31 of the indicated year. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

The University of Alberta offers a four-year Doctor of Dental Surgery (DDS) degree program. A minimum of two years of university preparation is a pre-requisite for acceptance into the program. The program produced 45 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR
DENTISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
DOCTOR OF DENTAL SURGERY			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	50	50	51
2nd Year	46	49	47
3rd Year	46	51	48
4th Year	44	45	49
Graduates:	42	44	45

TABLE 4
DENTISTS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS
BY SPECIALTY, ALBERTA, 1989

Specialty	Number of Dentists[2]	Personnel-to-Population Ratio[3]
Dental Public Health	2	1:1,211,500
Endodontics	15	1:161,533
Oral Pathology	5	1:484,600
Oral Radiology	1	1:2,423,000
Oral and Maxillofacial Surgery	21	1:115,381
Orthodontics	49	1:49,449
Paedodontics	15	1:161,533
Periodontics	20	1:121,150
Prosthodontics	23	1:105,348
Specialty Total	151	1:16,046
General Practice Total	1,134	1:2,137
GRAND TOTAL	**1,285**	**1:1,886**

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Source: Alberta Dental Association. Number of dentists registered with the ADA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the ADA.

3 Source: Ratios calculated using a provincial population of 2,423,000 as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

Denturists

I. Overview

Definition: Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impressions and moulds of teeth, gums and jaws and design dentures. Direct other workers to construct dentures.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 208 certified denturists (formerly known as certified dental mechanics) who resided in Alberta and registered with the Board of Examiners for Certified Dental Mechanics in 1989.[1] Denturists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 69 percent of the total. The provincial denturist-to-population ratio was 1:11,649 in 1989.

Denturists usually offer their services from denture clinics independent of a dentist. In Alberta, denturists are permitted to furnish complete dentures only, that is, appliances for individuals with no natural upper or lower teeth. Some of the services performed by denturists, such as the manufacture of complete dentures, are also provided by dental technicians. However, dental technicians are not permitted to fit appliances. Other functions of denturists, such as taking impressions for complete dentures, are also carried out by dentists (see chapters on Dental Technicians and Dentists).

1 Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1989. Number includes denturists who were also dental technicians.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified Dental Mechanics
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Mr. Elmar Abele

b) Professional Association:

Denturist Society of Alberta
201, 2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

Administrator: Ms. Lorrie Rees
President: Mr. Shaun Yandt

c) Legislation:

Under the authority of the Dental Mechanics Act, individuals who wish to practise as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct of denturists and for maintaining professional discipline. It is empowered to re-examine any denturist at any time and to suspend or cancel his/her certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

In 1981, the Dental Mechanics Act was amended to permit dental mechanics to identify themselves as "denturists." The titles "denturist," "dental mechanic," and "certified dental mechanic" are reserved for individuals registered under the Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED DENTURISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	57,154	1:14,289
2 (Lethbridge)	13	115,903	1:8,916
3 (Pincher Creek)	1	36,307	1:36,307
4 (Hanna)	0	12,269	—
5 (Drumheller)	5	38,402	1:7,680
6 (Calgary excluding CMA)	1	47,611	1:47,611
7 (Stettler)	3	39,998	1:13,333
8 (Red Deer)	11	122,985	1:11,180
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	10	77,103	1:7,710
11 (Edmonton excluding CMA)	1	19,464	1:19,464
12 (Bonnyville)	2	46,281	1:23,141
13 (Whitecourt)	2	55,957	1:27,979
14 (Hinton)	2	25,634	1:12,817
15 (Banff)	1	24,737	1:24,737
16 (Fort McMurray)	3	46,082	1:15,361
17 (High Level)	1	49,473	1:49,473
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	4	71,916	1:17,979
Census Metropolitan Area (CMA) of Calgary	53	702,270	1:13,250
Census Metropolitan Area (CMA) of Edmonton	90	803,730	1:8,930
PROVINCIAL TOTAL	**208**	**2,423,000**	**1:11,649**

1 Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1989. Number includes denturists who were also dental technicians.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DENTURISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	53	702,270	1:13,250
Census Metropolitan Area (CMA) of Edmonton	90	803,730	1:8,930
10,000 to 69,999			
Camrose	4	12,950	1:3,238
Fort McMurray	2	33,700	1:16,850
Grande Prairie	1	27,210	1:27,210
Lethbridge	9	60,610	1:6,734
Medicine Hat	4	42,790	1:10,698
Red Deer	7	55,950	1:7,993
Wetaskiwin	1	10,480	1:10,480
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	0	9,180	—
Crowsnest Pass	1	6,480	1:6,480
Drumheller	3	6,670	1:2,223
Edson	1	7,370	1:7,370
High River	1	5,330	1:5,330
Hinton	1	9,890	1:9,890
Innisfail	1	5,650	1:5,650
Lacombe	1	6,190	1:6,190
Lloydminster	2	9,620	1:4,810
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	2	6,500	1:3,250
Ponoka	2	5,710	1:2,855
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	2	4,990	1:2,495
Taber	1	6,270	1:6,270
Vegreville	1	4,990	1:4,990
Whitecourt	0	6,560	—
Under 5,000	16	539,320	1:33,708
PROVINCIAL TOTAL	**208**	**2,423,000**	**1:11,649**

1 Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31, 1989. Number includes denturists who were also dental technicians.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
DENTURISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	201	202	208
% Change in Number of Registered Personnel	6.9%	0.5%	3.0%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:11,829	1:11,825	1:11,649

IV. Educational Programs

As a result of the 1988 amendment to the regulation governing denturists, individuals who wish to practise as denturists must now complete a formal education course of studies. In Alberta, this training consists of a two-year program in denturist technology offered by the Northern Alberta Institute of Technology. Graduates are then required to apprentice for two years under the supervision of a certified denturist and to pass a comprehensive examination. The diploma program produced 13 graduates in 1988-89. The number of newly-certified denturists in 1989 was 10.

TABLE 3
EDUCATIONAL PROGRAM FOR
DENTURISTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
DENTURIST TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	18	18	18
Graduates:	15	15	13

1 Source: The Board of Examiners for Certified Dental Mechanics, Alberta Professions and Occupations Bureau. Number of denturists registered with the Board and residing in Alberta as of December 31 of the indicated year.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Dietary Technologists

I. Overview

Definition: Assist in planning and supervising food service programs in governmental, institutional and commercial establishments. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technologists is not mandatory, and since some dietary technologists are employed outside of health and social services, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

There were 279 dietary technologists practising in the health and social service sector in Alberta in 1989.[1] Of these, 67 percent were employed in acute care hospitals, 13 percent in auxiliary hospitals and ten percent in nursing homes.[2] Dietary technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 54 percent of the total. The provincial dietary technologist-to-population ratio was 1:8,685 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Dietary Technologists Association

P.O. Box 3791, Station "D" or	P.O. Box 2353
Edmonton, Alberta	Calgary, Alberta
T5L 4J8	T2P 2M6

President: Ms. Rosemary Jacobsen

c) Legislation:

There is no legislation regulating dietary technologists in Alberta at present. However, in October 1989, the professional association applied for designation under the Health Disciplines Act.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING DIETARY TECHNOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	57,154	1:6,350
2 (Lethbridge)	14	115,903	1:8,279
3 (Pincher Creek)	6	36,307	1:6,051
4 (Hanna)	5	12,269	1:2,454
5 (Drumheller)	8	38,402	1:4,800
6 (Calgary excluding CMA)	6	47,611	1:7,935
7 (Stettler)	8	39,998	1:5,000
8 (Red Deer)	18	122,985	1:6,833
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	12	77,103	1:6,425
11 (Edmonton excluding CMA)	2	19,464	1:9,732
12 (Bonnyville)	5	46,281	1:9,256
13 (Whitecourt)	7	55,957	1:7,994
14 (Hinton)	2	25,634	1:12,817
15 (Banff)	4	24,737	1:6,184
16 (Fort McMurray)	3	46,082	1:15,361
17 (High Level)	4	49,473	1:12,368
18 (Grande Cache)	2	13,466	1:6,733
19 (Grande Prairie)	12	71,916	1:5,993
Census Metropolitan Area (CMA) of Calgary	64	702,270	1:10,973
Census Metropolitan Area (CMA) of Edmonton	88	803,730	1:9,133
PROVINCIAL TOTAL	**279**	**2,423,000**	**1:8,685**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING DIETARY TECHNOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	64	702,270	1:10,973
Census Metropolitan Area (CMA) of Edmonton	88	803,730	1:9,133
10,000 to 69,999			
Camrose	1	12,950	1:12,950
Fort McMurray	2	33,700	1:16,850
Grande Prairie	3	27,210	1:9,070
Lethbridge	7	60,610	1:8,659
Medicine Hat	8	42,790	1:5,349
Red Deer	7	55,950	1:7,993
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	1	9,180	1:9,180
Crowsnest Pass	2	6,480	1:3,240
Drumheller	2	6,670	1:3,335
Edson	1	7,370	1:7,370
High River	3	5,330	1:1,777
Hinton	1	9,890	1:9,890
Innisfail	1	5,650	1:5,650
Lacombe	0	6,190	—
Lloydminster	5	9,620	1:1,924
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	3	6,500	1:2,167
Ponoka	5	5,710	1:1,142
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	2	4,890	1:2,445
Stettler	0	4,990	—
Taber	1	6,270	1:6,270
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	69	539,320	1:7,816
PROVINCIAL TOTAL	**279**	**2,423,000**	**1:8,685**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
DIETARY TECHNOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	261	253	279
% Change in Number of Practising Personnel	5.2%	−3.1%	10.3%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:9,110	1:9,442	1:8,685

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer a two-year program to train dietary technologists. The two programs together produced 44 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
DIETARY TECHNOLOGISTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
DIETARY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	26	25	25
2nd Year	19	24	20
Graduates:	17	22	16
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	42	41	43
2nd Year	31	35	23
Graduates:	28	29	28
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	45	51	44

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Dietitians/Nutritionists

1. Overview

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to the community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 401 dietitians/nutritionists who resided in Alberta and registered with the Alberta Registered Dietitians Association (ARDA) in 1989.[1] Not all registered dietitians/nutritionists practise in the health care and social service sector. According to a workforce survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 330 dietitians and nutritionists employed in health and social service agencies and institutions in 1989.[2] Of these, 58 percent were employed in acute care hospitals, 16 percent in nursing homes and eight percent in auxiliary hospitals.[3]

Registered dietitians/nutritionists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 80 percent of all those registered. The registered dietitian/nutritionist-to-population ratio was 1:6,042 in Alberta in 1989.

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1 Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1989.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

3 Ibid.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Registered Dietitians Association
370 Terrace Plaza
4445 Calgary Trail South
Edmonton, Alberta
T6H 5R7

President: Ms. Janice Kolasko
President Elect: Ms. Denise Bardeau-Milner

b) Legislation:

Although there is no mandatory registration requirement under the Registered Dietitians Act for dietitians/nutritionists in order to practise in the province, only dietitians/nutritionists who are registered with the Alberta Registered Dietitians Association (ARDA) may use the title of "registered dietitian."

In addition to registration functions, the ARDA is responsible for regulating the conduct of its members and maintaining professional discipline. The Universities Coordinating Council evaluates the educational qualifications while the professional association evaluates the practical experience required for registration.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	6	57,154	1:9,526
2 (Lethbridge)	12	115,903	1:9,659
3 (Pincher Creek)	7	36,307	1:5,187
4 (Hanna)	1	12,269	1:12,269
5 (Drumheller)	2	38,402	1:19,201
6 (Calgary excluding CMA)	4	47,611	1:11,903
7 (Stettler)	0	39,998	—
8 (Red Deer)	15	122,985	1:8,199
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	7	77,103	1:11,015
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	3	46,281	1:15,427
13 (Whitecourt)	5	55,957	1:11,191
14 (Hinton)	1	25,634	1:25,634
15 (Banff)	2	24,737	1:12,369
16 (Fort McMurray)	4	46,082	1:11,521
17 (High Level)	1	49,473	1:49,473
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	5	71,916	1:14,383
Census Metropolitan Area (CMA) of Calgary	149	702,270	1:4,713
Census Metropolitan Area (CMA) of Edmonton	173	803,730	1:4,646
PROVINCIAL TOTAL	**401**	**2,423,000**	**1:6,042**

1 Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED DIETITIANS/NUTRITIONISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	149	702,270	1:4,713
Census Metropolitan Area (CMA) of Edmonton	173	803,730	1:4,646
10,000 to 69,999			
Camrose	2	12,950	1:6,475
Fort McMurray	4	33,700	1:8,425
Grande Prairie	2	27,210	1:13,605
Lethbridge	10	60,610	1:6,061
Medicine Hat	6	42,790	1:7,132
Red Deer	12	55,950	1:4,663
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	1	6,670	1:6,670
Edson	1	7,370	1:7,370
High River	1	5,330	1:5,330
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	1	6,190	1:6,190
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	2	5,070	1:2,535
Peace River	1	6,500	1:6,500
Ponoka	1	5,710	1:5,710
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	1	6,270	1:6,270
Vegreville	0	4,990	—
Whitecourt	1	6,560	1:6,560
Under 5,000	29	539,320	1:18,597
PROVINCIAL TOTAL	**401**	**2,423,000**	**1:6,042**

1 Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
DIETITIANS/NUTRITIONISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	359	379	401
% Change in Number of Registered Personnel	–1.9%	5.6%	5.8%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:6,623	1:6,303	1:6,042

1 Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the ARDA and residing in Alberta as of April 30 of the indicated year.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program with a major in foods and nutrition. The program produced 36 graduates in 1988-89. The University of Alberta also offers separate master's degree programs in both foods and nutrition. There were five graduates from these two programs in 1988-89. In addition to post-secondary training, individuals must complete a dietetic internship in order to qualify as a registered dietitian.

TABLE 3
EDUCATIONAL PROGRAMS FOR
DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. BACCALAUREATE PROGRAM			
University of Alberta			
Home Economics: Foods and Nutrition			
(Program Length: 4 years)			
Enrolments:			
1st Year	51	54	38
2nd Year	48	53	68
3rd Year	37	37	57
4th Year	54	41	39
Graduates:	32	30	36
B. MASTER'S PROGRAMS			
University of Alberta			
Home Economics: Foods			
(Program Length: 2 years)			
Enrolments:	5	8	6
Graduates:	1	2	1
University of Alberta			
Home Economics: Nutrition			
(Program Length: 2 years)			
Enrolments:	9	16	7
Graduates:	3	2	4
PROVINCIAL TOTAL			
Number of M.Sc. Programs: 2			
Graduates:	4	4	5

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Emergency Medical Technicians

I. Overview

Definition: An emergency attendant:

> Gives emergency care to sick and injured persons at the scene of an accident or illness and during transport to a hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to- mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of ambulance driver if required.
>
> (Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Emergency medical technicians — ambulance (EMT-A) are ambulance attendants who have received training to provide emergency services at the basic life support level.[1]

In Alberta, training at the EMT-A level is provided at the Southern Alberta Institute of Technology and at the Alberta Vocational Centre at Lac La Biche.

Emergency medical technicians — paramedic (EMT-P) are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2]

In Alberta, training at the EMT-P level is provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

As of 1986, registration for emergency medical technicians — paramedic and ambulance was set out under the Health Disciplines Act.

There were 1,311 emergency medical technicians registered with the Alberta Prehospital Professions Association (APPA) in this reporting period.[3] This is a decrease of 31 (2.3%) over the previous year. Of the total, 68 percent were classified as ambulance attendants and 32 percent as paramedics. Emergency medical technicians in the Census Metropolitan Areas of Calgary and Edmonton accounted for 49 percent of the total. The provincial personnel-to-population ratio was 1:1,848.

In Alberta, municipalities have the power to set the level of ambulance services beyond the legislated minimum standard. Some municipalities have established ambulance services at the advanced life support level: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the uneven distribution of emergency medical personnel in Alberta.

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1 "Basic life support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available." (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 7, Supplement; 1974: p. 84).

2 According to the American Heart Association, advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion lifeline, employment of definitive therapy, including drug administration and stabilization of the patient's condition. (American Heart Association, "Standards for cardiopulmonary resuscitation and emergency cardiac care." **Journal of the American Medical Association**, Vol. 227, No. 17, Supplement; 1974.)

3 Source: Alberta Prehospital Professions Association. Number of active emergency medical technicians (Paramedic and Ambulance) registered with the APPA and residing in Alberta as of February 15, 1990.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Prehospital Professions Association
8711 – 50 Avenue
Edmonton, Alberta
T6E 5H4

Registrar: Ms. Jackeline Osborne
President: Mr. Ed Moffat

b) Legislation:

There are several statutes which set standards for ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A ambulance" in the province be staffed by at least one qualified attendant who at the minimum holds a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

The Health Disciplines Act sets educational standards for individuals who practise in a discipline regulated under the Act. Emergency medical technicians, both ambulance and paramedic, have been regulated under this Act since December 31, 1985. The Alberta Prehospital Professions Association is designated under the Act as responsible for registration and discipline of members. The titles "emergency medical technician — ambulance" and "emergency medical technician — paramedic" are reserved for registered members. In addition, the Act provides a mechanism to hear complaints against a registered member, and to discipline those whose skill, judgement or conduct is unacceptable, or those who contravene the legislation.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	25	57,154	1:2,286
2 (Lethbridge)	105	115,903	1:1,104
3 (Pincher Creek)	27	36,307	1:1,345
4 (Hanna)	9	12,269	1:1,363
5 (Drumheller)	23	38,402	1:1,670
6 (Calgary excluding CMA)	47	47,611	1:1,013
7 (Stettler)	26	39,998	1:1,538
8 (Red Deer)	122	122,985	1:1,008
9 (Rocky Mountain House)	10	16,258	1:1,626
10 (Camrose)	25	77,103	1:3,084
11 (Edmonton excluding CMA)	9	19,464	1:2,163
12 (Bonnyville)	45	46,281	1:1,028
13 (Whitecourt)	37	55,957	1:1,512
14 (Hinton)	16	25,634	1:1,602
15 (Banff)	21	24,737	1:1,178
16 (Fort McMurray)	40	46,082	1:1,152
17 (High Level)	19	49,473	1:2,604
18 (Grande Cache)	8	13,466	1:1,683
19 (Grande Prairie)	54	71,916	1:1,332
Census Metropolitan Area (CMA) of Calgary	316	702,270	1:2,222
Census Metropolitan Area (CMA) of Edmonton	327	803,730	1:2,458
PROVINCIAL TOTAL	**1,311**	**2,423,000**	**1:1,848**

1 Source: Alberta Prehospital Professions Association. Number of active emergency medical technicians (Paramedic and Ambulance) registered with the APPA and residing in Alberta as of February 15, 1990.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED EMERGENCY MEDICAL TECHNICIANS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	316	702,270	1:2,222
Census Metropolitan Area (CMA) of Edmonton	327	803,730	1:2,458
10,000 to 69,999			
Camrose	5	12,950	1:2,590
Fort McMurray	33	33,700	1:1,021
Grande Prairie	17	27,210	1:1,601
Lethbridge	82	60,610	1:739
Medicine Hat	24	42,790	1:1,783
Red Deer	76	55,950	1:736
Wetaskiwin	5	10,480	1:2,096
5,000 to 9,999			
Bonnyville	19	5,470	1:288
Brooks	12	9,180	1:765
Crowsnest Pass	3	6,480	1:2,160
Drumheller	8	6,670	1:834
Edson	4	7,370	1:1,843
High River	17	5,330	1:314
Hinton	11	9,890	1:899
Innisfail	20	5,650	1:283
Lacombe	10	6,190	1:619
Lloydminster	1	9,620	1:9,620
Okotoks	8	6,020	1:753
Olds	6	5,070	1:845
Peace River	4	6,500	1:1,625
Ponoka	5	5,710	1:1,142
Rocky Mountain House	6	5,340	1:890
Slave Lake	0	5,800	—
St. Paul	9	4,890	1:543
Stettler	7	4,990	1:713
Taber	3	6,270	1:2,090
Vegreville	5	4,990	1:998
Whitecourt	3	6,560	1:2,187
Under 5,000	265	539,320	1:2,035
PROVINCIAL TOTAL	**1,311**	**2,423,000**	**1:1,848**

1 Source: Alberta Prehospital Professions Association. Number of active emergency medical technicians (Paramedic and Ambulance) registered with the APPA and residing in Alberta as of February 15, 1990.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	1,366[1]	1,342[1]	1,311[2]
% Change in Number of Registered Personnel	35.7%	−1.8%	−2.3%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:1,741	1:1,780	1:1,848

IV. Educational Programs

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year diploma program in emergency medical technology — paramedic. The two programs produced 41 graduates in 1988-89. Alberta Vocational Centre — Lac La Biche and the Southern Alberta Institute of Technology each offer a program (of varying lengths) in emergency medical technology — ambulance. The two programs produced 187 graduates in 1988-89.

1 Source: Emergency Medical Technicians Committee (Paramedic and Ambulance), Alberta Health Disciplines Board. Number of EMTs registered with the Board and residing in Alberta as of December 31 of the year indicated.

2 Source: Alberta Prehospital Professions Association. Number of active emergency medical technicians (Paramedic and Ambulance) registered with the APPA and residing in Alberta as of February 15, 1990.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
EMERGENCY MEDICAL TECHNICIANS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. EMT — PARAMEDIC TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	23	19	17
2nd Year	14	20	20
Graduates:	17	15	27
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	30	21	31
2nd Year	30	32	19
Graduates:	22	24	14
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	39	39	41
B. EMT — AMBULANCE TECHNOLOGY CERTIFICATE			
Alberta Vocational Centre — Lac La Biche (Program Length: Approx. 200 hours)			
Enrolments:			
1st Year	236	82	66
Graduates:	186	47	42
Southern Alberta Institute of Technology (Program Length: Approx. 250-300 hours)			
Enrolments:			
1st Year	398	305	194
Graduates:	127	43	145
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	313	90	187

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Health Record Administrators

I. Overview

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics such as reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

The survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of manpower information because data from the professional association represents both health record administrators and technicians.

There were 140 health record administrators practising in Alberta in 1989.[1] Sixty-nine percent of these individuals were employed in acute care hospitals.[2] Health record administrators employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 53 percent of the total. The provincial health record administrator-to-population ratio was 1:17,307 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Elaine Jo Larsback

c) Legislation:

At present, there is no legislation regulating health record administrators in Alberta. However, the professional association has applied for designation under the Health Disciplines Act.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING HEALTH RECORD ADMINISTRATORS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	57,154	1:28,577
2 (Lethbridge)	9	115,903	1:12,878
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	3	38,402	1:12,801
6 (Calgary excluding CMA)	3	47,611	1:15,870
7 (Stettler)	6	39,998	1:6,666
8 (Red Deer)	8	122,985	1:15,373
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	5	77,103	1:15,421
11 (Edmonton excluding CMA)	2	19,464	1:9,732
12 (Bonnyville)	5	46,281	1:9,256
13 (Whitecourt)	5	55,957	1:11,191
14 (Hinton)	1	25,634	1:25,634
15 (Banff)	3	24,737	1:8,246
16 (Fort McMurray)	3	46,082	1:15,361
17 (High Level)	3	49,473	1:16,491
18 (Grande Cache)	1	13,466	1:13,466
19 (Grande Prairie)	6	71,916	1:11,986
Census Metropolitan Area (CMA) of Calgary	25	702,270	1:28,091
Census Metropolitan Area (CMA) of Edmonton	49	803,730	1:16,403
PROVINCIAL TOTAL	**140**	**2,423,000**	**1:17,307**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF
PRACTISING HEALTH RECORD ADMINISTRATORS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	25	702,270	1:28,091
Census Metropolitan Area (CMA) of Edmonton	49	803,730	1:16,403
10,000 to 69,999			
Camrose	2	12,950	1:6,475
Fort McMurray	0	33,700	—
Grande Prairie	0	27,210	—
Lethbridge	2	60,610	1:30,305
Medicine Hat	1	42,790	1:42,790
Red Deer	2	55,950	1:27,975
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	3	9,180	1:3,060
Crowsnest Pass	2	6,480	1:3,240
Drumheller	2	6,670	1:3,335
Edson	0	7,370	—
High River	3	5,330	1:1,777
Hinton	1	9,890	1:9,890
Innisfail	1	5,650	1:5,650
Lacombe	1	6,190	1:6,190
Lloydminster	1	9,620	1:9,620
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	1	6,500	1:6,500
Ponoka	2	5,710	1:2,855
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	0	5,800	—
St. Paul	3	4,890	1:1,630
Stettler	1	4,990	1:4,990
Taber	1	6,270	1:6,270
Vegreville	1	4,990	1:4,990
Whitecourt	1	6,560	1:6,560
Under 5,000	31	539,320	1:17,397
PROVINCIAL TOTAL	**140**	**2,423,000**	**1:17,307**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	149	135	140
% Change in Number of Practising Personnel	2.8%	–9.4%	3.7%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:15,958	1:17,694	1:17,307

IV. Educational Programs

The Northern Alberta Institute of Technology offers a two-year health records administration diploma program. The program produced 13 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR
HEALTH RECORD ADMINISTRATORS IN ALBERTA[3]

	1986–87	1987–88	1988–89
HEALTH RECORD ADMINISTRATION DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	16	17	17
2nd Year	13	14	12
Graduates:	12	15	13

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Health Record Technicians

I. Overview

Definition: Assist health record administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: *Health Manpower Provincial Report, Manitoba, 1982*. Winnipeg, Manitoba: Manitoba Department of Health, 1982)

The survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information because data from the professional association represents both health record administrators and technicians.

There were 355 health record technicians practising in Alberta in 1989.[1] Of these, 76 percent were employed in acute care hospitals.[2] Health record technicians employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 44 percent of the total. The number of health record technicians employed in Alberta increased by 21.2 percent between 1987 and 1989. During the same period the provincial population grew by 1.9 percent. The provincial health record technician-to-population ratio was 1:6,825 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Elaine Jo Larsback

c) Legislation:

At present, there is no legislation regulating health record technicians in Alberta. However, the professional association has applied for designation and regulation under the Health Disciplines Act.

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1 Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING HEALTH RECORD TECHNICIANS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	57,154	1:5,196
2 (Lethbridge)	18	115,903	1:6,439
3 (Pincher Creek)	13	36,307	1:2,793
4 (Hanna)	6	12,269	1:2,045
5 (Drumheller)	4	38,402	1:9,601
6 (Calgary excluding CMA)	10	47,611	1:4,761
7 (Stettler)	16	39,998	1:2,500
8 (Red Deer)	23	122,985	1:5,347
9 (Rocky Mountain House)	3	16,258	1:5,419
10 (Camrose)	25	77,103	1:3,084
11 (Edmonton excluding CMA)	4	19,464	1:4,866
12 (Bonnyville)	11	46,281	1:4,207
13 (Whitecourt)	11	55,957	1:5,087
14 (Hinton)	5	25,634	1:5,127
15 (Banff)	3	24,737	1:8,246
16 (Fort McMurray)	9	46,082	1:5,120
17 (High Level)	10	49,473	1:4,947
18 (Grande Cache)	3	13,466	1:4,489
19 (Grande Prairie)	12	71,916	1:5,993
Census Metropolitan Area (CMA) of Calgary	85	702,270	1:8,262
Census Metropolitan Area (CMA) of Edmonton	73	803,730	1:11,010
PROVINCIAL TOTAL	**355**	**2,423,000**	**1:6,825**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING HEALTH RECORD TECHNICIANS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	85	702,270	1:8,262
Census Metropolitan Area (CMA) of Edmonton	73	803,730	1:11,010
10,000 to 69,999			
Camrose	4	12,950	1:3,238
Fort McMurray	5	33,700	1:6,740
Grande Prairie	4	27,210	1:6,803
Lethbridge	12	60,610	1:5,051
Medicine Hat	11	42,790	1:3,890
Red Deer	8	55,950	1:6,994
Wetaskiwin	4	10,480	1:2,620
5,000 to 9,999			
Bonnyville	2	5,470	1:2,735
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	3	7,370	1:2,457
High River	6	5,330	1:888
Hinton	2	9,890	1:4,945
Innisfail	3	5,650	1:1,883
Lacombe	1	6,190	1:6,190
Lloydminster	4	9,620	1:2,405
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	1	6,500	1:6,500
Ponoka	6	5,710	1:952
Rocky Mountain House	3	5,340	1:1,780
Slave Lake	2	5,800	1:2,900
St. Paul	1	4,890	1:4,890
Stettler	1	4,990	1:4,990
Taber	2	6,270	1:3,135
Vegreville	1	4,990	1:4,990
Whitecourt	0	6,560	—
Under 5,000	111	539,320	1:4,859
PROVINCIAL TOTAL	**355**	**2,423,000**	**1:6,825**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
HEALTH RECORD TECHNICIANS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	293	347	355
% Change in Number of Practising Personnel	5.0%	18.4%	2.3%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:8,115	1:6,884	1:6,825

IV. Educational Programs

The Southern Alberta Institute of Technology (SAIT) offers a 12-month health record technician certificate program. The program produced 17 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR
HEALTH RECORD TECHNICIANS IN ALBERTA[3]

	1986–87	1987–88	1988–89
HEALTH RECORD TECHNICIAN CERTIFICATE			
Southern Alberta Institute of Technology			
(Program Length: 12 months)			
Enrolments:	25	25	27
Graduates:	16	13	17

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Medical Laboratory Technologists

I. Overview

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatibility tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta branch of the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

There were 2,563 medical laboratory technologists practising in Alberta in 1989.[1] About half (53%) of these individuals were employed in acute care hospitals and 38 percent worked in medical laboratories and x-ray facilities.[2] Medical laboratory technologists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 79 percent of the total. The provincial medical laboratory technologist-to-population ratio was 1:945 in 1989.

Some of the basic laboratory services provided by medical laboratory technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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1 Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Valerie Girard
President Elect: Ms. Margaret Smith

c) Legislation:

There is no legislation regulating medical laboratory technologists in Alberta at present. However, the professional association has applied for designation under the Health Disciplines Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	44	57,154	1:1,299
2 (Lethbridge)	108	115,903	1:1,073
3 (Pincher Creek)	16	36,307	1:2,269
4 (Hanna)	1	12,269	1:12,269
5 (Drumheller)	15	38,402	1:2,560
6 (Calgary excluding CMA)	20	47,611	1:2,381
7 (Stettler)	22	39,998	1:1,818
8 (Red Deer)	79	122,985	1:1,557
9 (Rocky Mountain House)	2	16,258	1:8,129
10 (Camrose)	49	77,103	1:1,574
11 (Edmonton excluding CMA)	13	19,464	1:1,497
12 (Bonnyville)	22	46,281	1:2,104
13 (Whitecourt)	21	55,957	1:2,665
14 (Hinton)	14	25,634	1:1,831
15 (Banff)	13	24,737	1:1,903
16 (Fort McMurray)	28	46,082	1:1,646
17 (High Level)	13	49,473	1:3,806
18 (Grande Cache)	8	13,466	1:1,683
19 (Grande Prairie)	47	71,916	1:1,530
Census Metropolitan Area (CMA) of Calgary	929	702,270	1:756
Census Metropolitan Area (CMA) of Edmonton	1,099	803,730	1:731
PROVINCIAL TOTAL	**2,563**	**2,423,000**	**1:945**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING MEDICAL LABORATORY TECHNOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	929	702,270	1:756
Census Metropolitan Area (CMA) of Edmonton	1,099	803,730	1:731
10,000 to 69,999			
Camrose	12	12,950	1:1,079
Fort McMurray	21	33,700	1:1,605
Grande Prairie	31	27,210	1:878
Lethbridge	89	60,610	1:681
Medicine Hat	42	42,790	1:1,019
Red Deer	70	55,950	1:799
Wetaskiwin	13	10,480	1:806
5,000 to 9,999			
Bonnyville	6	5,470	1:912
Brooks	7	9,180	1:1,311
Crowsnest Pass	6	6,480	1:1,080
Drumheller	4	6,670	1:1,668
Edson	5	7,370	1:1,474
High River	7	5,330	1:761
Hinton	9	9,890	1:1,099
Innisfail	0	5,650	—
Lacombe	1	6,190	1:6,190
Lloydminster	13	9,620	1:740
Okotoks	0	6,020	—
Olds	4	5,070	1:1,268
Peace River	5	6,500	1:1,300
Ponoka	4	5,710	1:1,428
Rocky Mountain House	2	5,340	1:2,670
Slave Lake	5	5,800	1:1,160
St. Paul	5	4,890	1:978
Stettler	5	4,990	1:998
Taber	8	6,270	1:784
Vegreville	8	4,990	1:624
Whitecourt	2	6,560	1:3,280
Under 5,000	151	539,320	1:3,572
PROVINCIAL TOTAL	**2,563**	**2,423,000**	**1:945**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	2,294	2,408	2,563
% Change in Number of Practising Personnel	3.9%	5.0%	6.4%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:1,036	1:992	1:945
– Western Canada[3]	1:1,063	1:1,067	—

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: Ratios for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1988**. Ottawa, Ontario: Department of National Health and Welfare, March 1990.

IV. Educational Programs

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology, in cooperation with a number of hospitals in Edmonton, Calgary, Red Deer and Lethbridge, offer a two-year medical laboratory technology diploma program. Together, the two programs produced 107 graduates in 1988-89. In addition, the University of Alberta offers a four-year bachelor of science program in medical laboratory science. This program produced 20 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	73	77	73
2nd Year	67	64	68
Graduates:	67	61	67
Southern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	54	48	47
2nd Year	50	50	40
Graduates:	41	48	40
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	108	109	107
B. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	35	35	36
2nd Year	25	26	26
3rd Year	21	22	25
4th Year	22	23	20
Graduates:	22	23	20

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Medical Radiation Technologists

I. Overview

Definition: Radiographic Technologists

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theatre or other specialized area to assist physician or surgeon.

Radiation Oncology Technologists

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation oncologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technologists

Prepare radioactive solutions and reagents and operate scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram.

Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Medical radiation technologists have been regulated under the Health Disciplines Act since January 1, 1986. Beginning in February 1988, the professional association assumed responsibility for registration and discipline of its members.

There were 1,268 medical radiation technologists registered with the Alberta Association of Medical Radiation Technologists in 1989. Of these, 1,096 were radiographic technologists, 99 were nuclear medicine technologists and 68 were radiation oncology technologists. Five individuals were qualified in more than one specialty.[1] Medical radiation technologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 72 percent of the total. All radiation oncology technologists are employed in Edmonton or Calgary at the Cross Cancer Institute or the Tom Baker Cancer Centre. The number of medical radiation technologists registered in Alberta increased by 18.1 percent between 1987 and 1989. During the same period the provincial population grew by 1.9 percent. The provincial personnel-to-population ratio was 1:1,911 in 1989.

Some of the basic x-ray services performed by medical radiation technologists are provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

II. Professional Association and Legislation Information

a) Professional Association/Registration Board:

Alberta Association of Medical Radiation Technologists
Suite #1, 2nd Floor
2210 – 39 Street North
Lethbridge, Alberta
T1H 5J2

President: Mr. Mike Carson

b) Legislation:

Regulations under the Health Disciplines Act set educational standards for registration and procedures for discipline of medical radiation technologists. These regulations also reserve the titles "medical radiation technologist," "nuclear medicine technologist," "radiation oncology technologist" and "radiographic technologist" for individuals registered under the Act. The Alberta Association of Medical Radiation Technologists is responsible for registration and investigation of complaints against members.

[1] Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1989.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	20	57,154	1:2,858
2 (Lethbridge)	64	115,903	1:1,811
3 (Pincher Creek)	13	36,307	1:2,793
4 (Hanna)	2	12,269	1:6,135
5 (Drumheller)	10	38,402	1:3,840
6 (Calgary excluding CMA)	20	47,611	1:2,381
7 (Stettler)	16	39,998	1:2,500
8 (Red Deer)	48	122,985	1:2,562
9 (Rocky Mountain House)	3	16,258	1:5,419
10 (Camrose)	30	77,103	1:2,570
11 (Edmonton excluding CMA)	9	19,464	1:2,163
12 (Bonnyville)	15	46,281	1:3,085
13 (Whitecourt)	10	55,957	1:5,596
14 (Hinton)	7	25,634	1:3,662
15 (Banff)	11	24,737	1:2,249
16 (Fort McMurray)	17	46,082	1:2,711
17 (High Level)	11	49,473	1:4,498
18 (Grande Cache)	7	13,466	1:1,924
19 (Grande Prairie)	34	71,916	1:2,115
Census Metropolitan Area (CMA) of Calgary	386	702,270	1:1,819
Census Metropolitan Area (CMA) of Edmonton	530	803,730	1:1,516
Location Unknown	5	—	—
PROVINCIAL TOTAL	**1,268**	**2,423,000**	**1:1,911**

1 Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED MEDICAL RADIATION TECHNOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	386	702,270	1:1,819
Census Metropolitan Area (CMA) of Edmonton	530	803,730	1:1,516
10,000 to 69,999			
Camrose	6	12,950	1:2,158
Fort McMurray	13	33,700	1:2,592
Grande Prairie	17	27,210	1:1,601
Lethbridge	47	60,610	1:1,290
Medicine Hat	20	42,790	1:2,140
Red Deer	34	55,950	1:1,646
Wetaskiwin	7	10,480	1:1,497
5,000 to 9,999			
Bonnyville	3	5,470	1:1,823
Brooks	7	9,180	1:1,311
Crowsnest Pass	3	6,480	1:2,160
Drumheller	3	6,670	1:2,223
Edson	3	7,370	1:2,457
High River	7	5,330	1:761
Hinton	4	9,890	1:2,473
Innisfail	4	5,650	1:1,413
Lacombe	2	6,190	1:3,095
Lloydminster	3	9,620	1:3,207
Okotoks	2	6,020	1:3,010
Olds	5	5,070	1:1,014
Peace River	5	6,500	1:1,300
Ponoka	3	5,710	1:1,903
Rocky Mountain House	2	5,340	1:2,670
Slave Lake	0	5,800	—
St. Paul	4	4,890	1:1,223
Stettler	5	4,990	1:998
Taber	4	6,270	1:1,568
Vegreville	4	4,990	1:1,248
Whitecourt	3	6,560	1:2,187
Under 5,000	127	539,320	1:4,247
Location Unknown	5	—	—
PROVINCIAL TOTAL	**1,268**	**2,423,000**	**1:1,911**

1 Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	1,074[1]	1,263[2]	1,268[2]
% Change in Number of Registered Personnel	−1.4%	N/A	0.4%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:2,214	1:1,891	1:1,911

IV. Educational Programs

Medical radiation technologists are trained in one of three areas: radiography (medical x-ray technology), radiation therapy (oncology), and nuclear medical technology.

Radiography: Seven training hospitals in Calgary, Edmonton and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program. There were 45 graduates in 1988-89.

Radiation Therapy: A 27-month program is offered at the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary. These programs produced 2 graduates in 1988-89.

Nuclear Medical Technology: A two-year program is offered by the Southern Alberta Institute of Technology in conjunction with the University of Alberta Hospitals in Edmonton and the Foothills Hospital in Calgary. The program produced 10 graduates in 1988-89.

1 Source: Medical Radiation Technologists Committee, Alberta Health Disciplines Board. Number of medical radiation technologists registered with the Committee and residing in Alberta as of December 31 1987.

2 Source: Alberta Association of Medical Radiation Technologists. Number of medical radiation technologists registered with the Association and residing in Alberta as of December 31, of the year indicated.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
MEDICAL RADIATION TECHNOLOGISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. MEDICAL X-RAY TECHNOLOGY DIPLOMA			
Northern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	48	48	48
2nd Year	48	45	46
Graduates:	57	47	45
B. RADIATION ONCOLOGY TECHNOLOGY DIPLOMA			
Cross Cancer Institute			
(Program Length: 27 months)			
Enrolments:			
1st Year	6	6	5
2nd Year	4	2	6
Graduates:	3	3	2
Tom Baker Cancer Centre			
(Program Length: 27 months)			
Enrolments:			
1st Year	4	4	4
2nd Year	2	5	4
Graduates:	—	7	—
PROVINCIAL TOTAL			
Number of Programs in Radiation Oncology: 2			
Graduates:	3	10	2
C. NUCLEAR MEDICAL TECHNOLOGY DIPLOMA			
Southern Alberta Institute of Technology			
(Program Length: 2 years)			
Enrolments:			
1st Year	16	16	15
2nd Year	14	11	15
Graduates:	14	10	10

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Occupational Hygiene Technologists

I. Overview

Definition: Under the supervision of occupational hygienists, study, evaluate and conduct health programs to control those environmental factors or stresses arising in a work situation which may cause sickness, injury or significant discomfort and inefficiency among workers. Collect, measure and analyze samples of dust, gases, vapors and other potentially toxic materials to determine adherence to prescribed standards. Investigate adequacy of ventilation, exhaust equipment, lighting and other conditions which may affect employee health. Perform sound-level evaluations to determine relationship of noise to employee discomfort and efficiency. Collaborate with other scientists and engineers to institute control and correction of hazards. Participate in education meetings to instruct employees in matters pertaining to occupational health.

(Source: Department of Health, Government of Alberta)

Since registration with the Alberta section of the American Industrial Hygiene Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted annually on March 31, by the Alberta Health and Social Services Disciplines Committee, has been used as the source of workforce information. However, in the 1989 survey difficulties were encountered in obtaining data on this occupational group. Therefore, the tables outlining the numbers and distribution of personnel have not been included in this publication.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

American Industrial Hygiene Association
(Alberta Section)
P.O. Box 1803, Station "M"
Calgary, Alberta
T2P 2L8

President: Mr. Gurdip Sanghera

c) Legislation:

There is no legislation regulating occupational hygiene technologists in Alberta at present.

III. Personnel Data

TABLE 1
SELECTED WORKFORCE STATISTICS FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	113	113	N/A
% Change in Number of Practising Personnel	22.8%	0.0%	N/A
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:21,042	1:21,139	N/A

IV. Educational Programs

Mount Royal College offers a diploma program in occupational hygiene technology. The program produced nine graduates in 1988-89.

TABLE 2
EDUCATIONAL PROGRAM FOR OCCUPATIONAL HYGIENE TECHNOLOGISTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
OCCUPATIONAL HYGIENE DIPLOMA			
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st year	14	22	14
2nd year	7	6	12
Graduates:	3	4	9

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, and 1988 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Services Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Occupational Therapists

I. Overview

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer tests and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Registration with the Alberta Association of Registered Occupational Therapists will become mandatory in 1990 when the Occupational Therapy Profession Act is proclaimed. The Association reported there were 423 active occupational therapists registered and residing in Alberta as of January 31, 1990.[1]

According to a survey of health and social service personnel working in Alberta, 49 percent of occupational therapists were employed in acute care hospitals, 15 percent in auxiliary hospitals, eight percent in health units, seven percent in nursing homes and six percent by school boards and in schools for the handicapped.[2] Occupational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 82 percent of the total registered with the Association. The provincial occupational therapist-to-population ratio was 1:5,728 in 1989.

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1 Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1990. Excludes honorary and student members.

2 Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Registered
Occupational Therapists
300, 5241 — Calgary Trail Southbound N.W.
Edmonton, Alberta
T6H 5G8

Registrar: Ms. Lorna Reimer
President: Ms. Heather Chilton
President Elect: Ms. Elizabeth Taylor

c) Legislation:

The Occupational Therapy Profession Act received royal assent at the 1987 spring session of the Alberta Legislature. Regulations were approved and the Act was proclaimed in the Spring of 1990. The legislation sets out the educational requirements for registration, provides a mechanism for the review of complaints, and reserves the title "occupational therapist" for registered members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
REGISTERED OCCUPATIONAL THERAPISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	57,154	1:7,144
2 (Lethbridge)	9	115,903	1:12,878
3 (Pincher Creek)	1	36,307	1:36,307
4 (Hanna)	1	12,269	1:12,269
5 (Drumheller)	3	38,402	1:12,801
6 (Calgary excluding CMA)	5	47,611	1:9,522
7 (Stettler)	2	39,998	1:19,999
8 (Red Deer)	17	122,985	1:7,234
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	4	77,103	1:19,276
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	4	46,281	1:11,570
13 (Whitecourt)	3	55,957	1:18,652
14 (Hinton)	0	25,634	—
15 (Banff)	3	24,737	1:8,246
16 (Fort McMurray)	1	46,082	1:46,082
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	10	71,916	1:7,192
Census Metropolitan Area (CMA) of Calgary	132	702,270	1:5,320
Census Metropolitan Area (CMA) of Edmonton	217	803,730	1:3,704
PROVINCIAL TOTAL	**423**	**2,423,000**	**1:5,728**

1 Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1990. Excludes honorary and student members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OCCUPATIONAL THERAPISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	132	702,270	1:5,320
Census Metropolitan Area (CMA) of Edmonton	217	803,730	1:3,704
10,000 to 69,999			
Camrose	1	12,950	1:12,950
Fort McMurray	1	33,700	1:33,700
Grande Prairie	8	27,210	1:3,401
Lethbridge	9	60,610	1:6,734
Medicine Hat	7	42,790	1:6,113
Red Deer	10	55,950	1:5,595
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	0	9,180	—
Crowsnest Pass	1	6,480	1:6,480
Drumheller	1	6,670	1:6,670
Edson	0	7,370	—
High River	2	5,330	1:2,665
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	3	6,190	1:2,063
Lloydminster	1	9,620	1:9,620
Okotoks	1	6,020	1:6,020
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	1	5,710	1:5,710
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	2	4,890	1:2,445
Stettler	1	4,990	1:4,990
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	22	539,320	1:24,515
PROVINCIAL TOTAL	**423**	**2,423,000**	**1:5,728**

1 Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, 1990. Excludes honorary and student members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising or Registered Personnel	348[1]	425[2]	423[2]
% Change in Number of Practising or Registered Personnel	5.5%	N/A	–0.5%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:6,832	1:5,620	1:5,728

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Alberta Association of Registered Occupational Therapists. Number of occupational therapists registered with the Association and residing in Alberta as of January 31, of the year indicated. Excludes honorary and student members.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

A four-year bachelor of science program in occupational therapy is offered at the University of Alberta. Students in this program may be enrolled in the basic or an accelerated route in which entry is made in the third year and studies are completed in 24 continuous months. The program produced 77 graduates in 1988-89. Under an interprovincial training agreement, five training places per year are reserved for Saskatchewan students in this program.

In addition, a two-year master of science program in occupational therapy commenced at the University of Alberta in 1986-87. The program produced two graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	Pre Professional Year		
2nd Year	42	40	40
3rd Year	75	79	41
4th Year	54	80	77
Graduates:	47	76	77
B. MASTER'S PROGRAM			
University of Alberta			
(Program Length. 2 years)			
Enrolments:	3	7	—
Graduates:	—	—	2

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Ophthalmic Dispensers

I. Overview

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthalmologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, RSA 1980)

There were 419 ophthalmic dispensers who resided in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1989.[1] Ophthalmic dispensers located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 81 percent of the total. The provincial ophthalmic dispenser-to-population ratio was 1:5,783 in 1989.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1989.

II. Professional Association and Legislation Information

a) Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

Chairman: Dr. Henry Wyatt

b) Professional Association:

Alberta Guild of Ophthalmic Dispensers
1140, 10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

Registrar: Mr. D. Whillans
President: Mr. R. D. Jeffries

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practise as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. The Board sets the educational qualifications and examinations required for obtaining a certificate of competency, or a special certificate of competency to dispense contact lenses. The titles "ophthalmic dispenser," "registered ophthalmic dispenser" and "optical dispenser" are reserved for registered members.

Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers, the professional association. The Alberta Guild of Ophthalmic Dispensers is responsible for regulating the conduct of its members and for maintaining professional discipline.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED OPHTHALMIC DISPENSERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	12	57,154	1:4,763
2 (Lethbridge)	20	115,903	1:5,795
3 (Pincher Creek)	1	36,307	1:36,307
4 (Hanna)	0	12,269	—
5 (Drumheller)	1	38,402	1:38,402
6 (Calgary excluding CMA)	0	47,611	—
7 (Stettler)	3	39,998	1:13,333
8 (Red Deer)	19	122,985	1:6,473
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	5	77,103	1:15,421
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	1	46,281	1:46,281
13 (Whitecourt)	0	55,957	—
14 (Hinton)	2	25,634	1:12,817
15 (Banff)	0	24,737	—
16 (Fort McMurray)	4	46,082	1:11,521
17 (High Level)	2	49,473	1:24,737
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	9	71,916	1:7,991
Census Metropolitan Area (CMA) of Calgary	146	702,270	1:4,810
Census Metropolitan Area (CMA) of Edmonton	193	803,730	1:4,164
PROVINCIAL TOTAL	**419**	**2,423,000**	**1:5,783**

1 Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OPHTHALMIC DISPENSERS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	146	702,270	1:4,810
Census Metropolitan Area (CMA) of Edmonton	193	803,730	1:4,164
10,000 to 69,999			
Camrose	1	12,950	1:12,950
Fort McMurray	4	33,700	1:8,425
Grande Prairie	7	27,210	1:3,887
Lethbridge	19	60,610	1:3,190
Medicine Hat	12	42,790	1:3,566
Red Deer	18	55,950	1:3,108
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	1	9,180	1:9,180
Crowsnest Pass	0	6,480	—
Drumheller	1	6,670	1:6,670
Edson	1	7,370	1:7,370
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	3	9,620	1:3,207
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	2	6,500	1:3,250
Ponoka	1	5,710	1:5,710
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	0	5,800	—
St. Paul	1	4,890	1:4,890
Stettler	2	4,990	1:2,495
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	6	539,320	1:89,887
PROVINCIAL TOTAL	**419**	**2,423,000**	**1:5,783**

1 Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	359	386	419
% Change in Number of Registered Personnel	5.6%	7.5%	8.5%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:6,623	1:6,188	1:5,783

1 Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of December 31 of the indicated year.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

Since 1986, the Northern Alberta Institute of Technology has offered programs for two levels of ophthalmic dispensing: eyeglasses and contact lenses. Individuals enrolled in the courses must serve a two-year apprenticeship in an optical laboratory or dispensary concurrent with their studies. Each course is two years in length and consists of independent study plus lectures in Edmonton and Calgary. The course in eyeglasses is a pre-requisite for the one in contact lenses. Following these courses, individuals must write the examination of the Ophthalmic Dispensers Examining Board. In May 1989, there were 50 graduates from the course in eyeglasses and seven from the course in contact lenses.

TABLE 3
EDUCATIONAL PROGRAMS FOR
OPHTHALMIC DISPENSERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
Northern Alberta Institute of Technology			
Eyeglass Dispensing			
(Program Length: 2 years)			
Independent Study			
Enrolments:			
1st Year	86	78	83
2nd Year	42	66	62
Graduates:	38	54	50
Northern Alberta Institute of Technology			
Contact Lens Dispensing			
(Program Length: 2 years)			
Independent Study			
Enrolments:			
1st Year	4	9	8
2nd Year	5	1	8
Graduates:	5	1	7
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	43	55	57

[1] Source: Northern Alberta Institute of Technology, Edmonton, May 1990.

Optometrists

I. Overview

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, its related structures and the human vision system in order to measure, assess, diagnose or refer for consultation or treatment any condition of the human eye, its related structures and the human vision system;

(ii) the treatment of conditions of the human eye, its related structures and the human vision system, through the prescribing and dispensing of ophthalmic appliances or other aids, the prescribing and provision of orthoptics or perceptual training and the offering of advice, consultation or counselling.

(Source: Optometry Profession Act, S.A. 1983, Ch. 0-16)

There were 212 optometrists who resided in Alberta and registered with the Alberta Association of Optometrists (AAO) in 1989.[1] Optometrists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 63 percent of the total. Some optometrists in the larger urban centres operate satellite offices in neighboring rural areas and smaller centres throughout the province. Some of the services provided by optometrists, such as the dispensing of ophthalmic appliances, can also be provided by ophthalmic dispensers (see chapter on Ophthalmic Dispensers). The provincial optometrist-to-population ratio was 1:11,429 in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Authority:

Alberta Association of Optometrists
#1, The Professional Centre
9333 – 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. R. Glenn Campbell
President: Dr. Graham W. Dawdy
President Elect: Dr. Jerry D. Berg

b) Legislation:

Under the authority of the Optometry Profession Act, all individuals who wish to practise as optometrists and use this title must apply for registration with the Alberta Association of Optometrists (AAO). The academic qualifications required for registration are set out in regulation. The Universities Coordinating Council evaluates educational qualifications and prescribes examinations for registration.

Besides registration, the AAO is also responsible for discipline and practice review of its members.

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1 Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1989. Excludes honorary, inactive and retired members.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED OPTOMETRISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	57,154	1:11,431
2 (Lethbridge)	16	115,903	1:7,244
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	2	38,402	1:19,201
6 (Calgary excluding CMA)	3	47,611	1:15,870
7 (Stettler)	1	39,998	1:39,998
8 (Red Deer)	18	122,985	1:6,833
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	6	77,103	1:12,851
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	3	46,281	1:15,427
13 (Whitecourt)	5	55,957	1:11,191
14 (Hinton)	1	25,634	1:25,634
15 (Banff)	3	24,737	1:8,246
16 (Fort McMurray)	2	46,082	1:23,041
17 (High Level)	3	49,473	1:16,491
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	8	71,916	1:8,990
Census Metropolitan Area (CMA) of Calgary	65	702,270	1:10,804
Census Metropolitan Area (CMA) of Edmonton	68	803,730	1:11,820
PROVINCIAL TOTAL	**212**	**2,423,000**	**1:11,429**

1 Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1989. Excludes honorary, inactive and retired members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED OPTOMETRISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	65	702,270	1:10,804
Census Metropolitan Area (CMA) of Edmonton	68	803,730	1:11,820
10,000 to 69,999			
Camrose	2	12,950	1:6,475
Fort McMurray	2	33,700	1:16,850
Grande Prairie	6	27,210	1:4,535
Lethbridge	14	60,610	1:4,329
Medicine Hat	5	42,790	1:8,558
Red Deer	14	55,950	1:3,996
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	1	9,180	1:9,180
Crowsnest Pass	2	6,480	1:3,240
Drumheller	1	6,670	1:6,670
Edson	0	7,370	—
High River	2	5,330	1:2,665
Hinton	2	9,890	1:4,945
Innisfail	0	5,650	—
Lacombe	1	6,190	1:6,190
Lloydminster	3	9,620	1:3,207
Okotoks	0	6,020	—
Olds	1	5,070	1:5,070
Peace River	1	6,500	1:6,500
Ponoka	3	5,710	1:1,903
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	1	4,890	1:4,890
Stettler	1	4,990	1:4,990
Taber	2	6,270	1:3,135
Vegreville	1	4,990	1:4,990
Whitecourt	2	6,560	1:3,280
Under 5,000	12	539,320	1:44,943
PROVINCIAL TOTAL	**212**	**2,423,000**	**1:11,429**

1 Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31, 1989. Excludes honorary, inactive and retired members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	212	215	212
% Change in Number of Registered Personnel	0.5%	1.4%	−1.4%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:11,216	1:11,110	1:11,429
– Western Canada[3]	1:12,373	1:12,172	—

IV. Educational Programs

There is no training program for optometrists in Alberta. However, since 1976, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario. Under this agreement, the three western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program.

In August 1986, the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology). In 1989, Alberta had a total of 20 students enrolled in the four-year training program at the University of Waterloo. Six students graduated in 1988-89.

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

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1 Source: Alberta Association of Optometrists. Number of optometrists registered with the AAO and residing in Alberta as of December 31 of the indicated year. Excludes honorary, inactive, and retired members.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: Ratios for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1988**. Ottawa, Ontario: Department of National Health and Welfare, March 1990.

Pharmacists

I. Overview

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 2,152 pharmacists who resided in Alberta and registered with the Alberta Pharmaceutical Association (APhA) in 1989.[1] According to a survey of health and social service personnel working in Alberta, 82 percent of pharmacists practised in community pharmacies while most of the remaining 17 percent were employed in hospital settings.[2] Pharmacists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 68 percent of the total. The provincial pharmacist-to-population ratio was 1:1,126 in 1989.

1 Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APhA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Licensing Body:

Alberta Pharmaceutical Association
10615 – 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. Greg E. Eberhart
President: Dr. Judy Baker

b) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practise as pharmacists must register with the Alberta Pharmaceutical Association (APhA).

The APhA is responsible for regulating the conduct of its members and for maintaining discipline. The Pharmaceutical Association Act sets the educational qualifications required for registration with the APhA.

A new Pharmaceutical Profession Act was passed at the 1988 spring session of the legislature. This Act will be proclaimed when new regulations are approved, probably in 1991.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PHARMACISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	49	57,154	1:1,166
2 (Lethbridge)	101	115,903	1:1,148
3 (Pincher Creek)	24	36,307	1:1,513
4 (Hanna)	8	12,269	1:1,534
5 (Drumheller)	27	38,402	1:1,422
6 (Calgary excluding CMA)	29	47,611	1:1,642
7 (Stettler)	30	39,998	1:1,333
8 (Red Deer)	119	122,985	1:1,033
9 (Rocky Mountain House)	7	16,258	1:2,323
10 (Camrose)	61	77,103	1:1,264
11 (Edmonton excluding CMA)	16	19,464	1:1,217
12 (Bonnyville)	36	46,281	1:1,286
13 (Whitecourt)	39	55,957	1:1,435
14 (Hinton)	17	25,634	1:1,508
15 (Banff)	26	24,737	1:951
16 (Fort McMurray)	27	46,082	1:1,707
17 (High Level)	13	49,473	1:3,806
18 (Grande Cache)	7	13,466	1:1,924
19 (Grande Prairie)	56	71,916	1:1,284
Census Metropolitan Area (CMA) of Calgary	622	702,270	1:1,129
Census Metropolitan Area (CMA) of Edmonton	834	803,730	1:964
Location Unknown	4	—	—
PROVINCIAL TOTAL	**2,152**	**2,423,000**	**1:1,126**

1 Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APhA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHARMACISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	622	702,270	1:1,129
Census Metropolitan Area (CMA) of Edmonton	834	803,730	1:964
10,000 to 69,999			
Camrose	17	12,950	1:762
Fort McMurray	21	33,700	1:1,605
Grande Prairie	28	27,210	1:972
Lethbridge	65	60,610	1:932
Medicine Hat	43	42,790	1:995
Red Deer	71	55,950	1:788
Wetaskiwin	11	10,480	1:953
5,000 to 9,999			
Bonnyville	9	5,470	1:608
Brooks	9	9,180	1:1,020
Crowsnest Pass	6	6,480	1:1,080
Drumheller	10	6,670	1:667
Edson	7	7,370	1:1,053
High River	7	5,330	1:761
Hinton	8	9,890	1:1,236
Innisfail	9	5,650	1:628
Lacombe	11	6,190	1:563
Lloydminster	9	9,620	1:1,069
Okotoks	5	6,020	1:1,204
Olds	5	5,070	1:1,014
Peace River	9	6,500	1:722
Ponoka	14	5,710	1:408
Rocky Mountain House	7	5,340	1:763
Slave Lake	0	5,800	—
St. Paul	10	4,890	1:489
Stettler	7	4,990	1:713
Taber	8	6,270	1:784
Vegreville	7	4,990	1:713
Whitecourt	3	6,560	1:2,187
Under 5,000	276	539,320	1:1,954
Location Unknown	4	—	—
PROVINCIAL TOTAL	**2,152**	**2,423,000**	**1:1,126**

1 Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APhA and residing in Alberta as of December 31, 1989. Excludes inactive and retired members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
PHARMACISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	1,980	2,078	2,152
% Change in Number of Registered Personnel	3.5%	4.9%	3.6%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:1,201	1:1,150	1:1,126

IV. Educational Programs

The University of Alberta offers a four-year baccalaureate program in pharmacy. The program produced 103 graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAM FOR
PHARMACISTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	88	89	86
2nd Year	129	111	123
3rd Year	114	126	119
4th Year	77	106	104
Graduates:	77	101	103

1 Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the APhA and residing in Alberta as of December 31 of the indicated year. Excludes inactive and retired members.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Pharmacy Assistants

I. Overview

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemicals or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keep inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

There were 606 pharmacy assistants practising in Alberta in 1989.[1] Of these, 60 percent were employed in community pharmacies and 38 percent in hospital pharmacies.[2] Pharmacy assistants employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 71 percent of the total. The number of pharmacy assistants employed in Alberta increased by 30.3 percent between 1987 and 1989. During the same period the provincial population grew by 1.9 percent. The provincial pharmacy assistant-to-population ratio was 1:3,998 in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

None.

b) Legislation:

There is no legislation regulating pharmacy assistants in Alberta at present.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PHARMACY ASSISTANTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	57,154	1:4,396
2 (Lethbridge)	24	115,903	1:4,829
3 (Pincher Creek)	5	36,307	1:7,261
4 (Hanna)	2	12,269	1:6,135
5 (Drumheller)	2	38,402	1:19,201
6 (Calgary excluding CMA)	3	47,611	1:15,870
7 (Stettler)	13	39,998	1:3,077
8 (Red Deer)	36	122,985	1:3,416
9 (Rocky Mountain House)	2	16,258	1:8,129
10 (Camrose)	13	77,103	1:5,931
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	6	46,281	1:7,714
13 (Whitecourt)	5	55,957	1:11,191
14 (Hinton)	4	25,634	1:6,409
15 (Banff)	1	24,737	1:24,737
16 (Fort McMurray)	14	46,082	1:3,292
17 (High Level)	6	49,473	1:8,246
18 (Grande Cache)	2	13,466	1:6,733
19 (Grande Prairie)	19	71,916	1:3,785
Census Metropolitan Area (CMA) of Calgary	195	702,270	1:3,601
Census Metropolitan Area (CMA) of Edmonton	238	803,730	1:3,377
PROVINCIAL TOTAL	**606**	**2,423,000**	**1:3,998**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PHARMACY ASSISTANTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	195	702,270	1:3,601
Census Metropolitan Area (CMA) of Edmonton	238	803,730	1:3,377
10,000 to 69,999			
Camrose	4	12,950	1:3,238
Fort McMurray	11	33,700	1:3,064
Grande Prairie	16	27,210	1:1,701
Lethbridge	20	60,610	1:3,031
Medicine Hat	12	42,790	1:3,566
Red Deer	21	55,950	1:2,664
Wetaskiwin	3	10,480	1:3,493
5,000 to 9,999			
Bonnyville	3	5,470	1:1,823
Brooks	3	9,180	1:3,060
Crowsnest Pass	0	6,480	—
Drumheller	2	6,670	1:3,335
Edson	2	7,370	1:3,685
High River	0	5,330	—
Hinton	2	9,890	1:4,945
Innisfail	1	5,650	1:5,650
Lacombe	2	6,190	1:3,095
Lloydminster	3	9,620	1:3,207
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	1	6,500	1:6,500
Ponoka	5	5,710	1:1,142
Rocky Mountain House	2	5,340	1:2,670
Slave Lake	0	5,800	—
St. Paul	1	4,890	1:4,890
Stettler	4	4,990	1:1,248
Taber	1	6,270	1:6,270
Vegreville	2	4,990	1:2,495
Whitecourt	0	6,560	—
Under 5,000	52	539,320	1:10,372
PROVINCIAL TOTAL	**606**	**2,423,000**	**1:3,998**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
PHARMACY ASSISTANTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	465	562	606
% Change in Number of Practising Personnel	18.0%	20.9%	7.8%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:5,113	1:4,250	1:3,998

IV. Educational Programs

In 1976, a ten-month program leading to a pharmacy technician certificate was established at Red Deer College. The program produced 42 graduates in 1988-89. Before the program was offered, most pharmacy assistants in Alberta were trained on the job.

TABLE 3
EDUCATIONAL PROGRAM FOR
PHARMACY ASSISTANTS IN ALBERTA[3]

	1986–87	1987–88	1988–89
PHARMACY TECHNICIAN CERTIFICATE			
Red Deer College (Program Length: 10 months)			
Enrolments:	43	44	44
Graduates:	38	38	42

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: **Alberta Health and Social Services Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Physical Therapists

I. Overview

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Give whirlpool and contrast baths and apply moist packs. Administer treatments using diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instruct patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,185 licensed, active physical therapists who resided in Alberta and registered with the College of Physical Therapists in 1989.[1] According to a survey conducted by the Alberta Health and Social Services Disciplines Committee, 41 percent of the practitioners were employed in acute care hospitals while 38 percent were in private practice.[2] Physical therapists located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 78 percent of the total. The provincial physical therapist-to-population ratio was 1:2,045 in 1989.

1 Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College of Physical Therapists and residing in Alberta as of May 1, 1990. Excludes inactive members.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

College of Physical Therapists of Alberta
#302, 6020 – 104 Street
Edmonton, Alberta
T6H 5S4

Registrar: Ms. JoAnne Horne
President: Mr. Peter Noel-Bentley

b) Professional Association:

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Marianne Hladiuk

c) Legislation:

The Physical Therapy Profession Act was proclaimed on September 30, 1985 (except Sec. 3(1)) replacing the Chartered Physiotherapists Act. The Act reserves the titles "physical therapist" or "physiotherapist" alone or in combination with other words. Employers may only hire registered members to perform physical therapy services.

The College of Physical Therapists of Alberta is responsible for registration of members, maintaining professional discipline and practice review. The Act sets out the educational requirements for registration. The Universities Coordinating Council evaluates the educational qualifications and determines equivalencies required for registration.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
REGISTERED PHYSICAL THERAPISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	23	57,154	1:2,485
2 (Lethbridge)	31	115,903	1:3,739
3 (Pincher Creek)	11	36,307	1:3,301
4 (Hanna)	5	12,269	1:2,454
5 (Drumheller)	6	38,402	1:6,400
6 (Calgary excluding CMA)	14	47,611	1:3,401
7 (Stettler)	7	39,998	1:5,714
8 (Red Deer)	50	122,985	1:2,460
9 (Rocky Mountain House)	5	16,258	1:3,252
10 (Camrose)	15	77,103	1:5,140
11 (Edmonton excluding CMA)	6	19,464	1:3,244
12 (Bonnyville)	10	46,281	1:4,628
13 (Whitecourt)	10	55,957	1:5,596
14 (Hinton)	8	25,634	1:3,204
15 (Banff)	11	24,737	1:2,249
16 (Fort McMurray)	13	46,082	1:3,545
17 (High Level)	5	49,473	1:9,895
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	27	71,916	1:2,664
Census Metropolitan Area (CMA) of Calgary	402	702,270	1:1,747
Census Metropolitan Area (CMA) of Edmonton	526	803,730	1:1,528
PROVINCIAL TOTAL	**1,185**	**2,423,000**	**1:2,045**

1 Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of May 1, 1990. Excludes inactive members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHYSICAL THERAPISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	402	702,270	1:1,747
Census Metropolitan Area (CMA) of Edmonton	526	803,730	1:1,528
10,000 to 69,999			
Camrose	4	12,950	1:3,238
Fort McMurray	12	33,700	1:2,808
Grande Prairie	18	27,210	1:1,512
Lethbridge	25	60,610	1:2,424
Medicine Hat	20	42,790	1:2,140
Red Deer	30	55,950	1:1,865
Wetaskiwin	5	10,480	1:2,096
5,000 to 9,999			
Bonnyville	2	5,470	1:2,735
Brooks	3	9,180	1:3,060
Crowsnest Pass	2	6,480	1:3,240
Drumheller	2	6,670	1:3,335
Edson	4	7,370	1:1,843
High River	2	5,330	1:2,665
Hinton	4	9,890	1:2,473
Innisfail	3	5,650	1:1,883
Lacombe	3	6,190	1:2,063
Lloydminster	1	9,620	1:9,620
Okotoks	3	6,020	1:2,007
Olds	2	5,070	1:2,535
Peace River	5	6,500	1:1,300
Ponoka	3	5,710	1:1,903
Rocky Mountain House	5	5,340	1:1,068
Slave Lake	0	5,800	—
St. Paul	1	4,890	1:4,890
Stettler	1	4,990	1:4,990
Taber	0	6,270	—
Vegreville	3	4,990	1:1,663
Whitecourt	2	6,560	1:3,280
Under 5,000	92	539,320	1:5,862
PROVINCIAL TOTAL	**1,185**	**2,423,000**	**1:2,045**

1 Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of May 1, 1990. Excludes inactive members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
PHYSICAL THERAPISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	1,135[1]	1,115[1]	1,185[2]
% Change in Number of Registered Personnel	8.8%	−1.8%	6.3%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:2,095	1:2,142	1:2,045

1 Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of December 31 of the indicated year. Excludes inactive members.

2 Source: College of Physical Therapists of Alberta. Number of physical therapists registered with the College and residing in Alberta as of May 1, 1990. Excludes inactive members.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

Prior to 1977, the University of Alberta offered a three-year diploma program and a four-year baccalaureate program in physical therapy. Now, only the four-year baccalaureate program is offered. The program produced 49 graduates in 1988-89. In addition, the University of Alberta offers a master's degree program in physical therapy which is approximately two years in length. The program produced five graduates in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
PHYSICAL THERAPISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. BACCALAUREATE PROGRAM			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	67	66	66
2nd Year	43	60	62
3rd Year	42	38	60
4th Year[2]	57	54	51
Graduates:	48	47	49
B. MASTER'S PROGRAM			
University of Alberta			
(Program Length: Approx. 2 years)			
Enrolments:			
1st Year	4	6	7
2nd Year	2	4	6
3rd Year	1	4	1
Graduates:	1	6	5

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Increases in the fourth year enrolments were due to graduates of the diploma program and diploma graduates from foreign institutions returning to complete the baccalaureate degree program.

Physicians

I. Overview

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 4,206 physicians who resided in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1989. Of these, 52 percent specialized in some area of medicine.[1] The number of physicians by specialty is shown in Table 4 of this chapter.

Physicians located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 77 percent of the total. Approximately ten percent were located in communities with a population of between 10,000 and 70,000, four percent were located in communities with a population of between 5,000 and 10,000, and eight percent were located in communities with a population of less than 5,000. The physician-to-population ratio was 1:576 in Alberta in 1989.

1 Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons as of January 1, 1990. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 – 108 Street N.W.
Edmonton, Alberta
T5K 1G9

Registrar: Dr. L. R. Olhauser
President: Dr. W. G. Hall

b) Professional Association:

Alberta Medical Association
#400, 12230 – 106 Avenue
Edmonton, Alberta
T5N 3Z1

Executive Director: Dr. Robert A. Burns
President: Dr. Ronald C. Gregg
President Elect: Dr. Raymond M. Hulyk

c) Legislation:

Under the authority of the Medical Profession Act, all individuals who wish to practise as physicians or osteopaths must be currently registered with the College of Physicians and Surgeons of Alberta.

Besides registration, the College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and for maintaining professional discipline. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist and also prescribes the conditions of practice of other physicians registered on special registries.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PHYSICIANS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	78	57,154	1:733
2 (Lethbridge)	163	115,903	1:711
3 (Pincher Creek)	37	36,307	1:981
4 (Hanna)	11	12,269	1:1,115
5 (Drumheller)	30	38,402	1:1,280
6 (Calgary excluding CMA)	47	47,611	1:1,013
7 (Stettler)	25	39,998	1:1,600
8 (Red Deer)	179	122,985	1:687
9 (Rocky Mountain House)	9	16,258	1:1,806
10 (Camrose)	70	77,103	1:1,101
11 (Edmonton excluding CMA)	25	19,464	1:779
12 (Bonnyville)	44	46,281	1:1,052
13 (Whitecourt)	38	55,957	1:1,473
14 (Hinton)	25	25,634	1:1,025
15 (Banff)	38	24,737	1:651
16 (Fort McMurray)	46	46,082	1:1,002
17 (High Level)	34	49,473	1:1,455
18 (Grande Cache)	5	13,466	1:2,693
19 (Grande Prairie)	77	71,916	1:934
Census Metropolitan Area (CMA) of Calgary	1,420	702,270	1:495
Census Metropolitan Area (CMA) of Edmonton	1,805	803,730	1:445
PROVINCIAL TOTAL	**4,206**	**2,423,000**	**1:576**

1 Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons of Alberta as of January 1, 1990. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PHYSICIANS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1,420	702,270	1:495
Census Metropolitan Area (CMA) of Edmonton	1,805	803,730	1:445
10,000 to 69,999			
Camrose	21	12,950	1:617
Fort McMurray	36	33,700	1:936
Grande Prairie	45	27,210	1:605
Lethbridge	126	60,610	1:481
Medicine Hat	69	42,790	1:620
Red Deer	117	55,950	1:478
Wetaskiwin	21	10,480	1:499
5,000 to 9,999			
Bonnyville	10	5,470	1:547
Brooks	10	9,180	1:918
Crowsnest Pass	6	6,480	1:1,080
Drumheller	13	6,670	1:513
Edson	9	7,370	1:819
High River	9	5,330	1:592
Hinton	13	9,890	1:761
Innisfail	10	5,650	1:565
Lacombe	10	6,190	1:619
Lloydminster	14	9,620	1:687
Okotoks	9	6,020	1:669
Olds	5	5,070	1:1,014
Peace River	10	6,500	1:650
Ponoka	25	5,710	1:228
Rocky Mountain House	9	5,340	1:593
Slave Lake	8	5,800	1:725
St. Paul	7	4,890	1:699
Stettler	6	4,990	1:832
Taber	7	6,270	1:896
Vegreville	8	4,990	1:624
Whitecourt	5	6,560	1:1,312
Under 5,000	343	539,320	1:1,572
PROVINCIAL TOTAL	**4,206**	**2,423,000**	**1:576**

1 Source: College of Physicians and Surgeons of Alberta. Number of physicians registered with the College of Physicians and Surgeons of Alberta as of January 1, 1990. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
PHYSICIANS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	4,005	4,092	4,206
% Change in Number of Registered Personnel	2.5%	2.2%	2.8%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:594	1:584	1:576

IV. Educational Programs

Alberta has two medical schools: one at the University of Alberta in Edmonton, and the other at the University of Calgary. The University of Alberta program is four years in length based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. Successful completion of a two-year pre-medicine program is the basic entry requirement for both programs. The two programs together produced 172 graduates in 1988-89.

Under the Medical Profession Act, three post-graduate training routes are available for physicians seeking to meet licensure requirements in Alberta. Physicians applying for general licensure must have successfully completed either the certification requirements of a Family Medicine Program approved by the College of Physicians and Surgeons of Alberta, or a two-year pre-licensure training program which meets the requirements specified by the College of Physicians and Surgeons of Alberta. To be licensed as a specialist, the applicant must complete an approved residency training program in an accredited institution and must pass the certification examinations set by the Royal College of Physicians and Surgeons of Canada.

With respect to post-graduate medical training, the Department of Health establishes the number of funded internship/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During the 1989-90 academic year, 663 full-time-equivalent internship/residency positions in Alberta teaching hospitals were funded by the Department of Health.

1 Source: College of Physicians and Surgeons of Alberta. Number of physicians who were registered with the College of Physicians and Surgeons of Alberta as of December 31, 1987, February 15, 1989 and January 1, 1990. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
PHYSICIANS IN ALBERTA[1]

	1986–87	1987–88	1988–89
DOCTOR OF MEDICINE			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	121	122	122
2nd Year	120	110	116
3rd Year	110	121	121
4th Year	122	121	105
Graduates:	115	119	103
University of Calgary			
(Program Length: 3 years)			
Enrolments:			
1st Year	73	74	75
2nd Year	72	73	69
3rd Year	73	68	77
Graduates:	72	64	69
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	187	183	172

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 4
PHYSICIANS BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1989

Specialty	Number of Physicians[1]	Personnel-to-Population Ratio[2]
Anaesthesia	194	1:12,490
Anatomical Pathology	46	1:52,674
Cardiology	42	1:57,690
Cardiovascular & Thoracic Surgery	18	1:134,611
Clinical Immunology	1	1:2,423,000
Community Medicine	16	1:151,438
Dermatology	25	1:96,920
Diagnostic Radiology	165	1:14,685
Emergency Medicine	35	1:69,229
Endocrinology/Metabolism	12	1:201,917
Gastroenterology	26	1:93,192
General Pathology	67	1:36,164
General Surgery	177	1:13,689
Geriatric Medicine	4	1:605,750
Haematological Pathology	7	1:346,143
Haematology	11	1:220,273
Infectious Diseases	10	1:242,300
Internal Medicine	367	1:6,602
Medical Biochemistry	4	1:605,750
Medical Microbiology	9	1:269,222
Medical Oncology	4	1:605,750
Nephrology	7	1:346,143
Neurology	42	1:57,690
Neuropathology	6	1:403,833
Neurosurgery	18	1:134,611
Nuclear Medicine	12	1:201,917
Obstetrics & Gynaecology	130	1:18,638
Ophthalmology	77	1:31,468
Orthopaedic Surgery	85	1:28,506
Otolaryngology	38	1:63,763
Pediatrics	186	1:13,027
Pediatric Cardiology	1	1:2,423,000
Pediatric General Surgery	5	1:484,600
Pediatric Neurology	1	1:2,423,000
Physical Medicine & Rehabilitation	16	1:151,438
Plastic Surgery	29	1:83,552
Psychiatry	195	1:12,426
Radiation Oncology	27	1:89,741
Respiratory Medicine	24	1:100,958
Rheumatology	18	1:134,611
Urology	40	1:60,575
Vascular Surgery	4	1:605,750
Total — Specialists	2,201	1:1,101
Total — Non-Specialists (Family Physicians, General Practitioners and Others)	2,005	1:1,208
GRAND TOTAL	**4,206**	**1:576**

1 Source: College of Physicians and Surgeons of Alberta. Number of physicians who were registered with the College of Physicians and Surgeons of Alberta as of January 1, 1990. Excludes out-of-province, retired, and non-practising life members, and members on the courtesy or education registries.

2 Source: Ratios calculated using a provincial population estimate of 2,423,000, as of June 1, 1989. Alberta Bureau of Statistics, June 1990.

Podiatrists

I. Overview

Definition: A podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: Podiatry Act, RSA 1980)

There were 23 podiatrists who resided in Alberta and registered with the Alberta Podiatry Association (APA) in 1989.[1] All were located in five major urban centres: the Census Metropolitan Areas of Calgary and Edmonton, and the cities of Red Deer, Lethbridge and Medicine Hat. The provincial podiatrist-to-population ratio was 1:105,348 in 1989.

1 Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Examiners in Podiatry
c/o Professions and Occupations Bureau
5th Floor, Kensington Place
10011 – 109 Street
Edmonton, Alberta
T5J 3S8

b) Professional Association:

Alberta Podiatry Association
134 – 8500 MacLeod Trail
Calgary, Alberta
T2H 2N1

President: Dr. Lee Nugent

c) Legislation:

In Alberta, podiatrists are regulated by the Podiatry Act. In accordance with this statute, individuals who wish to practise as podiatrists in Alberta apply to the Board of Examiners in Podiatry, a provincial certification body. The Board sets the educational qualifications required for registration and certifies eligible individuals. Successful candidates register with the Alberta Podiatry Association (APA), the professional body responsible for registration and discipline of its members.

In June 1987, an amendment to the Podiatry Act removed the exclusive scope of practice clause in order to allow other qualified individuals, such as nurses, to offer foot care services. Although the mandatory requirements of the Act have been removed, individuals who wish to practise podiatry and bill services to the provincial health care insurance program are still required to obtain certification through the Board and maintain membership in the Association.

In April 1988, the Alberta Podiatry Association applied to the Health Disciplines Board for designation under the Health Disciplines Act. The Board has not completed its investigation on whether the discipline should be regulated under the Act.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PODIATRISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	57,154	1:57,154
2 (Lethbridge)	1	115,903	1:115,903
8 (Red Deer)	1	122,985	1:122,985
All Other Census Divisions	0	620,958	—
Census Metropolitan Area (CMA) of Calgary	12	702,270	1:58,523
Census Metropolitan Area (CMA) of Edmonton	8	803,730	1:100,466
PROVINCIAL TOTAL	**23**	**2,423,000**	**1:105,348**

1 Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PODIATRISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	12	702,270	1:58,523
Census Metropolitan Area (CMA) of Edmonton	8	803,730	1:100,466
10,000 to 69,999			
Camrose	0	12,950	—
Fort McMurray	0	33,700	—
Grande Prairie	0	27,210	—
Lethbridge	1	60,610	1:60,610
Medicine Hat	1	42,790	1:42,790
Red Deer	1	55,950	1:55,950
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	0	5,710	—
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	0	539,320	—
PROVINCIAL TOTAL	**23**	**2,423,000**	**1:105,348**

1 Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR PODIATRISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	21	24	23
% Change in Number of Registered Personnel	10.5%	14.3%	–4.2%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:113,224	1:99,529	1:105,348
– Western Canada[3]	1:96,443	1:103,205	—

IV. Educational Programs

There are no training programs for podiatrists in Canada. The United States has seven schools of podiatry. The programs consist of four years of professional training with four prerequisite years of university studies. All of Alberta's podiatrists were trained in the United States.

1 Source: Alberta Podiatry Association. Number of podiatrists registered with the APA and residing in Alberta as of December 31 of the indicated year.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: Ratios for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1988**. Ottawa, Ontario: Department of National Health and Welfare, March 1990.

Prosthetists and Orthotists

I. Overview

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding, and machine and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

There were 29 prosthetists and orthotists practising in Alberta in 1989.[1] The majority (90%) were employed in the Census Metropolitan Areas of Calgary and Edmonton. These individuals are employed in acute care hospitals, auxiliary hospitals, community agencies and in private practice. The provincial prosthetist/orthotist-to-population ratio was 1:83,552 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Prosthetists and Orthotists
11024 – 127 Street
Edmonton, Alberta
T5M 0T2

President: Mr. Armand Huncault

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present. In October 1988, the Alberta Association of Prosthetists and Orthotists applied for designation under the Health Disciplines Act. The Health Disciplines Board will conduct an investigation to determine if the discipline should be regulated under the Act.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	57,154	—
2 (Lethbridge)	1	115,903	1:115,903
3 (Pincher Creek)	0	36,307	—
4 (Hanna)	0	12,269	—
5 (Drumheller)	0	38,402	—
6 (Calgary excluding CMA)	0	47,611	—
7 (Stettler)	0	39,998	—
8 (Red Deer)	1	122,985	1:122,985
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	0	77,103	—
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	1	46,281	1:46,281
13 (Whitecourt)	0	55,957	—
14 (Hinton)	0	25,634	—
15 (Banff)	0	24,737	—
16 (Fort McMurray)	0	46,082	—
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	0	71,916	—
Census Metropolitan Area (CMA) of Calgary	9	702,270	1:78,030
Census Metropolitan Area (CMA) of Edmonton	17	803,730	1:47,278
PROVINCIAL TOTAL	**29**	**2,423,000**	**1:83,552**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PROSTHETISTS AND ORTHOTISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	9	702,270	1:78,030
Census Metropolitan Area (CMA) of Edmonton	17	803,730	1:47,278
10,000 to 69,999			
Camrose	0	12,950	—
Fort McMurray	0	33,700	—
Grande Prairie	0	27,210	—
Lethbridge	1	60,610	1:60,610
Medicine Hat	0	42,790	—
Red Deer	0	55,950	—
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	1	5,710	1:5,710
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	0	4,890	—
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	0	539,320	—
PROVINCIAL TOTAL	**29**	**2,423,000**	**1:83,552**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	34	28	29
% Change in Number of Practising Personnel	9.6%	−17.6%	3.6%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:69,932	1:85,311	1:83,552

IV. Educational Programs

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on the job, some have been trained in post-secondary educational institutions in other provinces such as the British Columbia Institute of Technology (BCIT). Alberta renewed its inter-provincial training agreement with BCIT and the British Columbia Government in 1986 to purchase three training places for Alberta students.

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

Psychologists

I. Overview

Definition: Collect, interpret and apply scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Study human behaviour and mental processes and investigate and recommend or provide treatment of psychological problems. Plan and carry out experiments using human beings and animal subjects, observe behaviour, and measure mental and physical characteristics. Analyze effects of hereditary and environmental factors on individual thought and behaviour. Undertake diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,165 chartered psychologists who resided in Alberta and registered with the Psychologists Association of Alberta (PAA) in 1989.[1] Not all chartered psychologists practise in the health care and social service sector. According to a workforce survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 1,015 psychologists employed in health care and social service agencies and institutions in Alberta in 1989.[2]

Psychologists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 86 percent of the total registered. The provincial chartered psychologist-to-population ratio was 1:2,080 in 1989.

1 Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of February 5, 1990. Excludes associate and student members.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Psychologists Association of Alberta
Suite 400, Sunlife Place
10123 – 99 Street
Edmonton, Alberta
T5J 3H1

Executive Director: Dr. A.E. Hohol
Registrar: Dr. Sandra Wolfe
President: Dr. Stanley Whitsett
President Elect: Dr. A. G. Scott

b) Legislation:

Psychologists are governed by the Psychology Profession Act which was proclaimed in March 1987 (except Section 15(1)).

Under the new act, the titles "psychologist" and "chartered psychologist" alone or in combination with other words are reserved for registered members. Non-registered members may still practise if this restriction is observed.

In addition, the titles "psychological associate in school psychology" and "psychological assistant" are reserved by regulation. Individuals who use titles which imply they are psychologists are contravening the legislation if they are not registered with the Psychologists Association of Alberta.

The Psychologists Association of Alberta is now responsible for registration, practice review and maintaining professional discipline. The Psychology Profession Act and Regulation set the basic educational qualifications required for registration as a psychologist. The Universities Coordinating Council has the authority to approve academic programs and determine equivalencies for registration as a chartered psychologist.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	9	57,154	1:6,350
2 (Lethbridge)	32	115,903	1:3,622
3 (Pincher Creek)	3	36,307	1:12,102
4 (Hanna)	0	12,269	—
5 (Drumheller)	6	38,402	1:6,400
6 (Calgary excluding CMA)	11	47,611	1:4,328
7 (Stettler)	2	39,998	1:19,999
8 (Red Deer)	51	122,985	1:2,411
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	7	77,103	1:11,015
11 (Edmonton excluding CMA)	2	19,464	1:9,732
12 (Bonnyville)	5	46,281	1:9,256
13 (Whitecourt)	8	55,957	1:6,995
14 (Hinton)	2	25,634	1:12,817
15 (Banff)	4	24,737	1:6,184
16 (Fort McMurray)	8	46,082	1:5,760
17 (High Level)	1	49,473	1:49,473
18 (Grande Cache)	1	13,466	1:13,466
19 (Grande Prairie)	11	71,916	1:6,538
Census Metropolitan Area (CMA) of Calgary	474	702,270	1:1,482
Census Metropolitan Area (CMA) of Edmonton	527	803,730	1:1,525
PROVINCIAL TOTAL	**1,165**	**2,423,000**	**1:2,080**

1 Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of February 5, 1989. Excludes associate and student members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PSYCHOLOGISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	474	702,270	1:1,482
Census Metropolitan Area (CMA) of Edmonton	527	803,730	1:1,525
10,000 to 69,999			
Camrose	3	12,950	1:4,317
Fort McMurray	5	33,700	1:6,740
Grande Prairie	9	27,210	1:3,023
Lethbridge	30	60,610	1:2,020
Medicine Hat	9	42,790	1:4,754
Red Deer	40	55,950	1:1,399
Wetaskiwin	2	10,480	1:5,240
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	5	6,670	1:1,334
Edson	1	7,370	1:7,370
High River	3	5,330	1:1,777
Hinton	1	9,890	1:9,890
Innisfail	1	5,650	1:5,650
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	3	6,020	1:2,007
Olds	2	5,070	1:2,535
Peace River	1	6,500	1:6,500
Ponoka	7	5,710	1:816
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	0	5,800	—
St. Paul	3	4,890	1:1,630
Stettler	2	4,990	1:2,495
Taber	1	6,270	1:6,270
Vegreville	1	4,990	1:4,990
Whitecourt	0	6,560	—
Under 5,000	34	539,320	1:15,862
PROVINCIAL TOTAL	**1,165**	**2,423,000**	**1:2,080**

1 Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of February 5, 1989. Excludes associate and student members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
PSYCHOLOGISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	1,121[1]	1,174[1]	1,165[2]
% Change in Number of Registered Personnel	2.2%	4.7%	−0.8%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:2,121	1:2,035	1:2,080

IV. Educational Programs

There are six master's degree programs in psychology in Alberta: Master of Science at the University of Calgary, Master of Arts and Master of Science at the University of Alberta, Master of Education in Educational Psychology at the University of Alberta and the University of Calgary, and Master of Science in Educational Psychology at the University of Calgary. These programs produced 105 graduates in 1988-89.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 35 graduates from these programs in 1988-89.

1 Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of December 31 of the indicated year. Excludes associate and student members.

2 Source: Psychologists Association of Alberta. Number of chartered psychologists registered with the PAA and residing in Alberta as of February 5, 1990. Excludes associate and student members.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. MASTER'S PROGRAMS			
University of Alberta			
Master of Arts in Psychology			
(Program Length: variable)			
Enrolments:			
1st Year	3	1	5
2nd Year	5	2	0
3rd Year[2]	2	5	1
Graduates:	2	6	2
University of Alberta			
Master of Science in Psychology			
(Program Length: variable)			
Enrolments:			
1st Year	5	5	4
2nd Year	2	4	4
3rd Year[2]	4	2	1
Graduates:	4	4	2
University of Alberta			
Master of Education in			
Educational Psychology			
(Program Length: 4 years)			
Enrolments:			
1st Year	51	69	63
2nd Year[3]	123	80	92
Graduates:	50	62	53
University of Calgary			
Master of Science in Psychology			
(Program Length: variable)			
Enrolments:			
1st Year	7	8	8
2nd Year	14	10	10
3rd Year[2]	9	4	5
Graduates:	13	16	19

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Third year refers to students enrolled in third and later years of the program.

3 Second year refers to students enrolled in second and later years of the program.

TABLE 3 *continued*
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	32	14	18
2nd Year[2]	56	50	48
Graduates:	13	19	20
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	20	23	27
2nd Year[2]	42	36	37
Graduates:[3]	20	10	9
PROVINCIAL TOTAL Number of Master's Programs: 6			
Graduates:	102	117	105
B. DOCTORAL PROGRAMS University of Alberta Ph.D. in Psychology (Program Length: approx. 2 years)			
Enrolments:			
1st Year	5	5	4
2nd Year	—	5	4
3rd Year[4]	7	5	6
Graduates:	1	3	6
University of Alberta Ph.D. in Educational Psychology (Maximum Program Length: 6 years)[5]			
Enrolments:			
1st Year	36	34	31
2nd Year[3]	98	99	111
Graduates:	13	17	19

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Second year refers to students enrolled in second and later years of the program.

3 The graduate figures refer to those students who convocated in a given year and do not include students only recommended to pass.

4 Third year refers to students enrolled in third and later years of the program.

5 Ph.D. programs require a two-year residency, though the norm for completion is 3 to 4 years.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
University of Calgary Ph.D. in Psychology (Program Length: approx. 3 years)			
Enrolments:			
1st year	2	3	4
2nd Year	1	6	6
3rd Year[2]	9	8	8
Graduates:	1	2	6
University of Calgary Ph.D. in Educational Psychology (Maximum Program Length: 6 years)			
Enrolments:			
1st Year	6	5	10
2nd Year[3]	33	31	28
Graduates:	9	8	4
PROVINCIAL TOTAL Number of Ph.D. Programs: 4			
Graduates:	24	30	35

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Third year refers to students enrolled in third and later years of the program.

3 Second year refers to students enrolled in second and later years of the program.

Public Health Inspectors

I. Overview

Definition: Public Health Inspectors within Alberta are Executive Officers of the Department of Health or the 27 local boards of health and are empowered to enforce the Public Health Act and regulations under the Act. Public Health Inspectors provide advice to the general public, industry, municipal, provincial and federal government agencies on matters pertaining to public and environmental health. They carry out inspections of food establishments, public housing, feed lots, piggeries, fur farms, poultry operations, rabbit keeping operations, recreation areas, work camps, abattoirs, wells, fountains, cisterns, water tanks, public lavatories, solid waste management facilities, institutions, swimming pools, dairies, private housing, public places, and any other place or building where a condition that is or might become injurious or dangerous to the public health, or that might hinder in any manner the prevention or suppression of disease. Public Health Inspectors provide written reports of inspections and where necessary recommend permitting or non-permitting of facilities. Where necessary, Public Health Inspectors may issue an order verbally or in the written form where they have reasonable and probable grounds to believe that a nuisance exists in or on the public place or private place that was the subject of inspection or that the place or the owner of it or any other person is in contravention of the Public Health Act or regulations under the Act. Public Health Inspectors take samples of water, milk, food and air and order chemical, physical or biological tests to determine contamination. Public Health Inspectors carry out investigations into food-borne illnesses, enteric disease, indoor air quality, and other public or environmental health issues. They carry out surveys, environmental health impact assessments and provide service in incidents of natural or man-made disasters such as uncontrolled releases of sour gas and hydrogen sulphide emissions. Public Health Inspectors provide various educational topics to the general public or industry in public or environmental health at public meetings or in an educational setting.

(Source: Alberta Health).

Public health inspectors are also known as environmental health officers. They are employed by federal, provincial and municipal governments, by educational institutions, and by private companies involved in food production, petroleum engineering, and pesticide production.

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

There were 116 public health inspectors practising in Alberta in 1989.[1] Public health inspectors employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 53 percent of the total. The provincial public health inspector-to-population ratio was 1:20,888 in 1989.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Box 5367, Station "F"
Ottawa, Alberta
K2C 3J1

Board Chairman: Mr. Bob Carson

b) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
54 Hunts Crescent
Drumheller, Alberta
T0J 0Y6

President: Mr. Dan Richen

c) Legislation:

Public health inspectors in Alberta are regulated under the Public Health Act. Under the legislation, all individuals who wish to practise as public health inspectors for a local board of health established under the Public Health Act or Health Unit Act must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING PUBLIC HEALTH INSPECTORS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	57,154	1:19,051
2 (Lethbridge)	6	115,903	1:19,317
3 (Pincher Creek)	3	36,307	1:12,102
4 (Hanna)	1	12,269	1:12,269
5 (Drumheller)	2	38,402	1:19,201
6 (Calgary excluding CMA)	2	47,611	1:23,806
7 (Stettler)	3	39,998	1:13,333
8 (Red Deer)	6	122,985	1:20,498
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	4	77,103	1:19,276
11 (Edmonton excluding CMA)	1	19,464	1:19,464
12 (Bonnyville)	3	46,281	1:15,427
13 (Whitecourt)	1	55,957	1:55,957
14 (Hinton)	3	25,634	1:8,545
15 (Banff)	2	24,737	1:12,369
16 (Fort McMurray)	3	46,082	1:15,361
17 (High Level)	3	49,473	1:16,491
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	8	71,916	1:8,990
Census Metropolitan Area (CMA) of Calgary	29	702,270	1:24,216
Census Metropolitan Area (CMA) of Edmonton	33	803,730	1:24,355
PROVINCIAL TOTAL	**116**	**2,423,000**	**1:20,888**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING PUBLIC HEALTH INSPECTORS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	29	702,270	1:24,216
Census Metropolitan Area (CMA) of Edmonton	33	803,730	1:24,355
10,000 to 69,999			
Camrose	2	12,950	1:6,475
Fort McMurray	2	33,700	1:16,850
Grande Prairie	4	27,210	1:6,803
Lethbridge	3	60,610	1:20,203
Medicine Hat	3	42,790	1:14,263
Red Deer	5	55,950	1:11,190
Wetaskiwin	1	10,480	1:10,480
5,000 to 9,999			
Bonnyville	1	5,470	1:5,470
Brooks	1	9,180	1:9,180
Crowsnest Pass	0	6,480	—
Drumheller	2	6,670	1:3,335
Edson	1	7,370	1:7,370
High River	1	5,330	1:5,330
Hinton	2	9,890	1:4,945
Innisfail	0	5,650	—
Lacombe	0	6,190	—
Lloydminster	0	9,620	—
Okotoks	0	6,020	—
Olds	0	5,070	—
Peace River	3	6,500	1:2,167
Ponoka	1	5,710	1:5,710
Rocky Mountain House	0	5,340	—
Slave Lake	1	5,800	1:5,800
St. Paul	2	4,890	1:2,445
Stettler	2	4,990	1:2,495
Taber	0	6,270	—
Vegreville	2	4,990	1:2,495
Whitecourt	0	6,560	—
Under 5,000	15	539,320	1:35,955
PROVINCIAL TOTAL	**116**	**2,423,000**	**1:20,888**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	126	132	116
% Change in Number of Practising Personnel	–2.3%	4.8%	–12.1%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:18,871	1:18,096	1:20,888

IV. Educational Programs

In Canada, only two post-secondary institutions offer formal training programs for public health inspectors. Programs in environmental health are offered at the British Columbia Institute of Technology (BCIT) in Vancouver and Ryerson Polytechnical Institute in Toronto. BCIT offers a two-year diploma program; Ryerson offers a four-year baccalaureate program. Upon completion of two years of training in either of these programs, an individual is eligible to sit for the Board of Certification examination provided he/she has completed 24 weeks of field experience in a local health authority. The certification examination consists of three parts, each of which must be successfully completed to obtain a passing grade. A candidate may attempt the examination only twice.

In Alberta, Athabasca University offers correspondence courses in public health.

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

Recreational Therapists

I. Overview

Definition: Through a program of recreational activities, recreational therapists provide goal-oriented treatment services directed to rehabilitation or modification of identified physical, emotional, cognitive and social behaviours. Recreational therapists perform the following tasks: assess individual client's leisure needs; document information (treatment plan, progress and discharge summary) on client's chart; develop individualized client programs focusing on treatment, leisure education and recreation participation; provide opportunities for individual, small and large group participation in regularly scheduled activities and special events; adapt activities to meet individual client's needs; attend rehabilitation team meetings and therapeutic recreation seminars, workshops and courses; supervise and orientate students, auxiliary personnel, and volunteers assigned to the department.

(Source: Alberta Therapeutic Recreation Association, May 1989)

Since registration with the Alberta Therapeutic Recreation Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

There were 289 recreational therapists practising in Alberta in 1989.[1] According to the survey, 28 percent of these individuals were employed in nursing homes and 26 percent in auxiliary hospitals. The remainder worked in acute care hospitals, psychiatric hospitals and other health and social service facilities.[2] Recreational therapists employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 64 percent of the total. The provincial recreational therapist-to- population ratio was 1:8,384 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Therapeutic Recreation Association
Box 4673
Edmonton, Alberta
T6E 5G5

President: Ms. Sue Hatfield-Cusano
President Elect: Ms. Theresa Matus

c) Legislation:

There is no legislation regulating recreational therapists in Alberta at present. However, the Alberta Therapeutic Recreation Association has applied for designation under the Health Disciplines Act.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Ibid.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF PRACTISING RECREATIONAL THERAPISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	8	57,154	1:7,144
2 (Lethbridge)	15	115,903	1:7,727
3 (Pincher Creek)	7	36,307	1:5,187
4 (Hanna)	1	12,269	1:12,269
5 (Drumheller)	1	38,402	1:38,402
6 (Calgary excluding CMA)	4	47,611	1:11,903
7 (Stettler)	4	39,998	1:10,000
8 (Red Deer)	28	122,985	1:4,392
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	10	77,103	1:7,710
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	5	46,281	1:9,256
13 (Whitecourt)	4	55,957	1:13,989
14 (Hinton)	1	25,634	1:25,634
15 (Banff)	4	24,737	1:6,184
16 (Fort McMurray)	0	46,082	—
17 (High Level)	1	49,473	1:49,473
18 (Grande Cache)	1	13,466	1:13,466
19 (Grande Prairie)	11	71,916	1:6,538
Census Metropolitan Area (CMA) of Calgary	90	702,270	1:7,803
Census Metropolitan Area (CMA) of Edmonton	94	803,730	1:8,550
PROVINCIAL TOTAL	**289**	**2,423,000**	**1:8,384**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING RECREATIONAL THERAPISTS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	90	702,270	1:7,803
Census Metropolitan Area (CMA) of Edmonton	94	803,730	1:8,550
10,000 to 69,999			
Camrose	3	12,950	1:4,317
Fort McMurray	0	33,700	—
Grande Prairie	6	27,210	1:4,535
Lethbridge	13	60,610	1:4,662
Medicine Hat	7	42,790	1:6,113
Red Deer	16	55,950	1:3,497
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	1	9,180	1:9,180
Crowsnest Pass	1	6,480	1:6,480
Drumheller	0	6,670	—
Edson	1	7,370	1:7,370
High River	1	5,330	1:5,330
Hinton	0	9,890	—
Innisfail	1	5,650	1:5,650
Lacombe	0	6,190	—
Lloydminster	1	9,620	1:9,620
Okotoks	0	6,020	—
Olds	1	5,070	1:5,070
Peace River	1	6,500	1:6,500
Ponoka	10	5,710	1:571
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	2	4,890	1:2,445
Stettler	2	4,990	1:2,495
Taber	1	6,270	1:6,270
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	37	539,320	1:14,576
PROVINCIAL TOTAL	**289**	**2,423,000**	**1:8,384**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
RECREATIONAL THERAPISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	262	278	289
% Change in Number of Practising Personnel	26.6%	6.1%	4.0%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:9,075	1:8,592	1:8,384

IV. Educational Programs

Mount Royal College and Lethbridge Community College offer a two-year diploma program in recreation therapy. These programs produced a total of 35 graduates in 1988-89. In addition, Red Deer College offers a two-year university transfer program leading to a Bachelor of Arts in Recreation Administration. The University of Alberta offers a four-year undergraduate degree and a two-year master's degree in Recreation Administration. Individuals may concentrate their studies in a number of areas including recreation for special populations (Therapeutic Recreation).

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
RECREATIONAL THERAPISTS IN ALBERTA

	1986–87	1987–88	1988–89
A. DIPLOMA PROGRAM[1]			
Mount Royal College			
(Program Length: 2 years)			
Enrolments:[2]			
1st Year	89	59	93
2nd Year	39	46	49
Graduates:	24	32	28
Lethbridge Community College[3]			
Recreation Management			
(Therapeutic Option)			
(Program Length: 2 years)			
Enrolments:			
1st Year	—	—	26
2nd Year	—	—	10
Graduates:	—	—	7
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 2			
Graduates:	NA	NA	35
B. BACCALAUREATE PROGRAM[4]			
University of Alberta			
Recreation Administration			
(Therapeutic Recreation Concentration)			
(Program Length: 4 years)			
Enrolments:(all years)	52	58	97
Graduates:	13	9	21
C. MASTER'S PROGRAM[4]			
University of Alberta			
Recreation Administration			
(Therapeutic Recreation Concentration)			
(Program Length: 2 years)			
Enrolments: (both years)	4	4	4
Graduates:	—	2	—

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 In 1986-87, the College offered a part-time credit extension program in addition to the regular program. Enrolment data include both programs.

3 This program is not new but is being included in this publication for the first time.

4 Source: Department of Recreation and Leisure Studies, University of Alberta (Edmonton), May 1990.

Registered Nurses

I. Overview

Definition: A registered nurse and a certified graduate nurse are entitled to apply professional nursing knowledge for the purpose of

(a) promoting, maintaining or restoring health;

(b) preventing illness, injury or disability;

(c) caring for the injured, disabled or incapacitated;

(d) assisting in childbirth;

(e) teaching nursing theory or practice;

(f) caring for the dying;

(g) co-ordinating health care;

(h) engaging in the administration, education, teaching or research required to implement or complement exclusive nursing practice or all or any of the matters referred to in clauses (a) to (g).

(Source: Nursing Profession Act, S.A. 1983, ch.N-14.5)

There were 22,253 active nurses who resided in Alberta and registered with the Alberta Association of Registered Nurses (AARN) in 1989.[1] According to a workforce survey conducted by the Alberta Health and Social Services Disciplines Committee, 17,810 registered nurses were employed as of March 31, 1989.[2] The number of practising registered nurses by specialty is shown in Table 4 of this chapter. Registered nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 69 percent of the total number registered. The provincial registered nurse-to-population ratio was 1:109 in 1989.

1 Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1989. Excludes inactive, honorary, associate, and retired members.

2 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Registered Nurses
11620 – 168 Street
Edmonton, Alberta
T5M 4A6

Executive Director: Ms. M. Bernadet Ratsoy
Registrar: Ms. Jean Smith
President: Ms. Phyllis Giovannetti
President Elect: Ms. Mary Pat Skene

b) Legislation:

On January 1, 1984 the Nursing Profession Act replaced the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires that all nurses practising in Alberta who wish to use the title of "registered nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the Alberta Association of Registered Nurses the authority to register qualified individuals in the appropriate registers, and to grant special permits and temporary permits to others who wish to practise under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities Coordinating Council. In addition, regulations specify individuals must have completed 1,125 hours or more of satisfactory nursing practice in the five years preceding registration. If this requirement is not met, a refresher course must be completed.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSES, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	449	57,154	1:127
2 (Lethbridge)	1,072	115,903	1:108
3 (Pincher Creek)	247	36,307	1:147
4 (Hanna)	95	12,269	1:129
5 (Drumheller)	228	38,402	1:168
6 (Calgary excluding CMA)	318	47,611	1:150
7 (Stettler)	281	39,998	1:142
8 (Red Deer)	1,255	122,985	1:98
9 (Rocky Mountain House)	64	16,258	1:254
10 (Camrose)	577	77,103	1:134
11 (Edmonton excluding CMA)	170	19,464	1:114
12 (Bonnyville)	303	46,281	1:153
13 (Whitecourt)	319	55,957	1:175
14 (Hinton)	98	25,634	1:262
15 (Banff)	187	24,737	1:132
16 (Fort McMurray)	354	46,082	1:130
17 (High Level)	184	49,473	1:269
18 (Grande Cache)	62	13,466	1:217
19 (Grande Prairie)	536	71,916	1:134
Census Metropolitan Area (CMA) of Calgary	6,874	702,270	1:102
Census Metropolitan Area (CMA) of Edmonton	8,476	803,730	1:95
Location Unknown	104	—	—
PROVINCIAL TOTAL	**22,253**	**2,423,000**	**1:109**

1 Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1989. Excludes inactive, honorary, associate and retired members.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED NURSES, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	6,874	702,270	1:102
Census Metropolitan Area (CMA) of Edmonton	8,476	803,730	1:95
10,000 to 69,999			
Camrose	132	12,950	1:98
Fort McMurray	287	33,700	1:117
Grande Prairie	272	27,210	1:100
Lethbridge	708	60,610	1:86
Medicine Hat	395	42,790	1:108
Red Deer	734	55,950	1:76
Wetaskiwin	113	10,480	1:93
5,000 to 9,999			
Bonnyville	53	5,470	1:103
Brooks	80	9,180	1:115
Crowsnest Pass	50	6,480	1:130
Drumheller	56	6,670	1:119
Edson	46	7,370	1:160
High River	67	5,330	1:80
Hinton	46	9,890	1:215
Innisfail	75	5,650	1:75
Lacombe	92	6,190	1:67
Lloydminster	45	9,620	1:214
Okotoks	59	6,020	1:102
Olds	58	5,070	1:87
Peace River	64	6,500	1:102
Ponoka	143	5,710	1:40
Rocky Mountain House	49	5,340	1:109
Slave Lake	29	5,800	1:200
St. Paul	61	4,890	1:80
Stettler	53	4,990	1:94
Taber	64	6,270	1:98
Vegreville	63	4,990	1:79
Whitecourt	39	6,560	1:168
Under 5,000	2,866	539,320	1:188
Location Unknown	104	—	—
PROVINCIAL TOTAL	**22,253**	**2,423,000**	**1:109**

1 Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30, 1989. Excludes inactive, honorary, associate and retired members.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
REGISTERED NURSES IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	21,467	21,699	22,253
% Change in Number of Registered Personnel	N/A	1.1%	2.6%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:111	1:110	1:109
– Western Canada[3]	1:113	1:110	—

IV. Educational Programs

In 1988-89, there were 14 basic education programs which met the training requirements to obtain status as a registered nurse. Of these, two were baccalaureate programs, seven were diploma programs offered in community colleges, four were diploma programs offered in hospitals and one was a diploma program for registered psychiatric nurses. These programs produced a total of 870 graduates (743 from the diploma programs and 127 from the baccalaureate programs) in 1988-89. Table 3A lists the basic education programs, including the supplementary program for psychiatric nurses.

In addition, there were 11 post-basic education programs for registered nurses. Of these, six were specialized studies leading to a certificate, three were post-diploma baccalaureate programs and two were master's degree programs. These programs produced a total of 357 graduates (223 from post-diploma baccalaureate programs, 36 from master's programs and 98 from post-basic certificate programs) in 1988-89. Table 3B lists the post-basic education programs for registered nurses.

1 Source: Alberta Association of Registered Nurses. Number of nurses registered with the AARN and residing in Alberta as of September 30 of the indicated year. Excludes inactive, honorary, associate and retired members. Note: The 1987 figure is revised with respect to the 1987 edition of this publication.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

3 Source: Ratios for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia combined derived from, **Health Personnel in Canada — 1988**. Ottawa, Ontario: Department of National Health and Welfare, March 1990.

TABLE 3A
EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. BACCALAUREATE NURSING PROGRAMS			
University of Alberta			
(Program Length: 4 years)			
Enrolments:			
1st Year	99	99	103
2nd Year	83	103	89
3rd Year	85	82	92
4th Year	95	76	84
Graduates:	95	80	76
University of Calgary			
(Program Length: 4 years)			
Enrolments:			
1st Year	64	64	80
2nd Year	64	61	57
3rd Year	57	58	52
4th Year	46	55	52
Graduates:	44	51	51
PROVINCIAL TOTAL			
Number of Baccalaureate Programs: 2			
Graduates:	139	131	127
B. DIPLOMA NURSING PROGRAMS			
Grande Prairie Regional College			
(Program Length: 88 weeks)			
Enrolments:			
1st Year	28	28	33
2nd Year	22	22	19
Graduates:	18	22	18
Grant MacEwan Community College			
(Program Length: 88 weeks)			
Enrolments:			
1st Year	79	82	83
2nd Year	62	60	62
Graduates:	58	58	62

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 3A continued
EDUCATIONAL PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
Keyano College (Program Length: 88 weeks)			
Enrolments:			
1st Year	29	24	27
2nd Year	18	22	18
Graduates:	15	22	19
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	106	105	104
2nd Year	70	72	65
Graduates:	50	64	61
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	37	38	38
2nd Year	35	24	24
Graduates:	24	21	30
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	116	113	121
2nd Year	103	108	112
Graduates:	83	84	81
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	80	79	87
2nd Year	80	67	61
Graduates:	71	60	57
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	152	151	150
2nd Year	124	122	105
3rd Year	128	113	113
Graduates:	103	97	99

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 3A continued
EDUCATIONAL PROGRAMS FOR
REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
Misericordia Hospital			
(Program Length: 3 years)			
Enrolments:			
1st Year	90	90	91
2nd Year	83	73	77
3rd Year	67	82	70
Graduates:	62	79	69
Royal Alexandra Hospital			
(Program Length: 2 1/3 years)			
Enrolments:			
1st Year	121	117	115
2nd Year	109	109	119
3rd Year	103	100	97
Graduates:	103	101	96
University of Alberta Hospitals			
(Program Length: 2 1/3 years)			
Enrolments:			
1st Year	170	164	164
2nd Year	162	151	163
3rd Year	142	149	161
Graduates:	141	148	133
PROVINCIAL TOTAL			
Number of Diploma Programs: 11			
Graduates:	728	756	725
C. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College			
(Program Length: 13 months)			
Enrolments:			
1st Year	19	17	18
Graduates:	14	16	18
B & C PROVINCIAL TOTAL			
Total Supplementary plus			
Basic Diploma Programs: 12			
Graduates:	742	772	743

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 3B
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. POST-DIPLOMA BACCALAUREATE EDUCATION PROGRAMS			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	118	94	92
2nd Year	255	141	136
Graduates:	118	137	130
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	35	19	20
Graduates:	61	63	41
University of Lethbridge (Program Length: 2 years)			
Enrolments:			
1st Year	87	84	72
2nd Year	28	41	114
Graduates:	29	30	52
PROVINCIAL TOTAL			
Number of Post-Diploma Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	208	230	223
B. MASTER OF NURSING PROGRAMS			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	19	21	20
2nd Year	38	39	33
Graduates:	8	15	22

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 3B continued
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
University of Calgary			
(Program Length: 2 years)			
Enrolments:			
1st Year	26	21	29
2nd Year	17	35	32
Graduates:	10	10	14
PROVINCIAL TOTAL			
Number of Master of Nursing Programs: 2			
Graduates:	18	25	36
C. CERTIFICATE EDUCATION PROGRAMS			
Emergency Intensive Care Certificate			
Misericordia Hospital School of Nursing			
(Program Length: 16 weeks)			
Enrolments:			
1st year	32	32	31
Graduates:	30	27	30
Extended Care Nursing			
Grant MacEwan Community College			
(Program Length: 1 year)			
Enrolments:			
1st year	31	30	26
Graduates:	11	34	16
Mental Health Nursing			
Mount Royal College			
(Program Length: 10 months full-time/ 2 1/2 years part-time)			
Enrolments:			
1st year	50	41	44
Graduates:	3	13	7
Neonatal Intensive Care Nursing Education			
Foothills Hospital School of Nursing			
(Program Length: variable)			
Enrolments:			
1st year	29	19	22
Graduates:	24	14	17

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

TABLE 3B continued
POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
Occupational Health Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments:			
1st year	27	32	49
Graduates:	31	5	7
Introduction to Operating Room Nursing[2] University of Alberta Hospitals (Program Length: 12 weeks)			
Enrolments:	—	21	22
Graduates:	—	21	21
PROVINCIAL TOTAL Number of Post-Basic Certificate Programs: 6			
Graduates:	99	114	98
PROVINCIAL TOTAL Number of Post-Basic Education Programs: 11			
Graduates:	325	369	357

Refresher Programs:

In 1988-89, ten institutions (Alberta Vocational Centre — Lac La Biche, Foothills Hospital, Grande Prairie Regional College, Grant MacEwan Community College, Keyano College, Lakeland College, Lethbridge Community College, Olds College, Red Deer College, and University of Alberta Hospitals) offered refresher courses in nursing for individuals returning to practise or those requiring upgrading of credentials to meet registration requirements. In the 1988-89 academic year, 568 students were enrolled in these programs and 415 graduated.[1]

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 This program commenced in 1987-88.

TABLE 4
PRACTISING NURSES BY SPECIALTY AND PERSONNEL-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1989

Specialty	Number of Practising Nurses[1]	Personnel-to-Population Ratio[2]
Administrative	1,659	1:1,461
Community/Public Health	749	1:3,235
Emergency Room	586	1:4,135
Home Care	579	1:4,185
Intensive Care Units (C.C.U., I.C.U., Burn)	1,288	1:1,881
Intravenous Therapy	42	1:57,690
Labor Delivery/Recovery Suite	328	1:7,387
Long Term Care/Rehabilitation	1,886	1:1,285
Maternal/Child	651	1:3,722
Medical/Surgical	4,206	1:576
Nursing Education	805	1:3,010
Occupational/Staff Health	269	1:9,007
Operating Room	679	1:3,568
Out-Patient Services	318	1:7,619
Pediatrics	628	1:3,858
Physicians' Offices, Medical or School Clinics	679	1:3,568
Psychiatric Wards	632	1:3,834
Recovery Room	176	1:13,767
Short Stay Unit	126	1:19,230
Specialty Total	16,286	1:149
General Duty and Other Areas	1,524	1:1,590
GRAND TOTAL	**17,810**[3]	**1:136**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Ratios calculated using a provincial population of 2,423,000 as of June 1, 1989, Alberta Bureau of Statistics, 1990.

3 The total number of personnel in Table 4 is less than the total number of personnel in Tables 1A and 1B. This table shows the number of practising personnel as of March 31, 1989 whereas Tables 1A and 1B show the number of active nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1989.

Registered Nursing Assistants

I. Overview

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision.[1] Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In 1977, certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the Nursing Assistants Registration Act of 1976.

There were 6,005[2] nursing assistants who resided in Alberta and registered with the Professional Council of Registered Nursing Assistants (PCRNA) in 1989.[3] According to a workforce survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 4,117 registered nursing assistants employed as of March 31, 1989.[4] Based on registration data however, the registered nursing assistant-to-population ratio was 1:403 in Alberta in 1989.

1 Alberta legislation only permits nursing assistants who have received supplementary training in the administration of medicine to administer oral medications other than narcotics, and prohibits them from giving injections.

2 The substantial decrease in reported registered nursing assistants from 1988 is due to the fact that registration data provided by the PCRNA was as of February 27, 1990. In previous years data provided was for the end of the registration year, December 31.

3 Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of February 27, 1990.

4 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Authority:

Professional Council of Registered Nursing Assistants
10604 – 170 Street
Edmonton, Alberta
T5S 1P3

Executive Director/Registrar: Ms. Pat Fredrickson
President: Ms. Marie Cornelson

b) Legislation:

Since January 1, 1987, nursing assistants have been regulated under the Health Disciplines Act. Under this Act, the Professional Council of Registered Nursing Assistants is designated as the body responsible for registration and professional conduct of its members. The Health Disciplines Board is responsible for setting educational qualifications for registration purposes. Under the authority of the Health Disciplines Act, all individuals who wish to use the title "registered nursing assistant" or "registered nursing orderly" must register with the Council.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	171	57,154	1:334
2 (Lethbridge)	288	115,903	1:402
3 (Pincher Creek)	148	36,307	1:245
4 (Hanna)	80	12,269	1:153
5 (Drumheller)	130	38,402	1:295
6 (Calgary excluding CMA)	169	47,611	1:282
7 (Stettler)	198	39,998	1:202
8 (Red Deer)	299	122,985	1:411
9 (Rocky Mountain House)	35	16,258	1:465
10 (Camrose)	284	77,103	1:271
11 (Edmonton excluding CMA)	90	19,464	1:216
12 (Bonnyville)	145	46,281	1:319
13 (Whitecourt)	167	55,957	1:335
14 (Hinton)	50	25,634	1:513
15 (Banff)	81	24,737	1:305
16 (Fort McMurray)	45	46,082	1:1,024
17 (High Level)	112	49,473	1:442
18 (Grande Cache)	35	13,466	1:385
19 (Grande Prairie)	319	71,916	1:225
Census Metropolitan Area (CMA) of Calgary	1,127	702,270	1:623
Census Metropolitan Area (CMA) of Edmonton	2,002	803,730	1:401
PROVINCIAL TOTAL	**6,005**	**2,423,000**	**1:403**

1 Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of February 27, 1990.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED NURSING ASSISTANTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	1,127	702,270	1:623
Census Metropolitan Area (CMA) of Edmonton	2,002	803,730	1:401
10,000 to 69,999			
Camrose	59	12,950	1:219
Fort McMurray	19	33,700	1:1,774
Grande Prairie	126	27,210	1:216
Lethbridge	131	60,610	1:463
Medicine Hat	139	42,790	1:308
Red Deer	121	55,950	1:462
Wetaskiwin	60	10,480	1:175
5,000 to 9,999			
Bonnyville	30	5,470	1:182
Brooks	38	9,180	1:242
Crowsnest Pass	43	6,480	1:151
Drumheller	26	6,670	1:257
Edson	24	7,370	1:307
High River	37	5,330	1:144
Hinton	16	9,890	1:618
Innisfail	42	5,650	1:135
Lacombe	16	6,190	1:387
Lloydminster	7	9,620	1:1,374
Okotoks	19	6,020	1:317
Olds	42	5,070	1:121
Peace River	30	6,500	1:217
Ponoka	40	5,710	1:143
Rocky Mountain House	31	5,340	1:172
Slave Lake	0	5,800	—
St. Paul	32	4,890	1:153
Stettler	42	4,990	1:119
Taber	27	6,270	1:232
Vegreville	23	4,990	1:217
Whitecourt	10	6,560	1:656
Under 5,000	1,616	539,320	1:334
Location Unknown	30	—	—
PROVINCIAL TOTAL	**6,005**	**2,423,000**	**1:403**

1 Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of February 27, 1990.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	7,414[1]	7,225[1]	6,005[2]
% Change in Number of Registered Personnel	N/A	–2.5%	N/A
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:321	1:331	1:403

1 Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of December 31 of the indicated year.

2 Source: Professional Council of Registered Nursing Assistants. Number of nursing assistants registered with the PCRNA and residing in Alberta as of February 27, 1990.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

The Alberta Vocational Centres (AVC) in Calgary and Edmonton offer a nursing assistant certificate program which is approximately 10 months in length. The Calgary program includes off-campus instruction at Crowsnest Pass, Drumheller and Claresholm; the Edmonton program is brokered at AVC — Grouard. In 1988-89, there were 222 graduates from these programs.

A six-month nursing assistant refresher program is offered at both AVC — Calgary and AVC — Edmonton. There were 50 graduates in 1988-89 from the two programs.[1]

In addition to the basic and refresher programs, a post-basic course, "Administration of Oral Medications" is being offered through AVC — Edmonton and AVC — Calgary. This is a distance delivery course of 9 to 11 weeks in length designed as part-time study for individuals who are presently employed. This course was offered as a pilot project in 1986. In 1989, there were 350 nursing assistants who completed this program.[2]

Another specialist course, "Working with the Aged" is offered through the PCRNA. This is a classroom delivery course of 160 hours (four 40-hour semesters spanned over 15 months). A total of 38 students successfully completed the pilot in 1989.[3]

In conjunction with AVC — Edmonton and the University of Alberta Hospital, the PCRNA developed the 20-week course "Orthopedic Technician Program." This course provides an opportunity for registered nursing assistants (RNA) to gain the knowledge and skills necessary to become certified as an orthopedic technician. There were nine students enrolled in the pilot project which commenced September 1989.[4]

In addition, "Intravenous Therapy" for the RNA, a ten-hour workshop developed and delivered to comply with the nursing assistant regulation, is available. The program is designed to update and supplement the RNA with the knowledge and skills required to maintain intravenous therapy in a safe and competent manner. In 1989, 126 nursing assistants completed this program.[5]

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1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

2 Source: Professional Council of Registered Nursing Assistants, February 1990.

3 Ibid.

4 Ibid.

5 Ibid.

TABLE 3
EDUCATIONAL PROGRAMS FOR
NURSING ASSISTANTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
CERTIFICATE PROGRAM			
Alberta Vocational Centre — Calgary[2] (Program Length: 38 weeks)			
Enrolments:	166	129	159
Graduates:	111	80	100
Alberta Vocational Centre — Edmonton[3] (Program Length: 38 weeks)			
Enrolments:	200	140	152
Graduates:	154	99	122
PROVINCIAL TOTAL			
Number of Certificate Programs: 2			
Graduates:	265	179	222

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 This program is also offered at the Chinook and Big Country Educational Consortia.

3 This program is also brokered at AVC — Grouard.

Registered Psychiatric Nurses

I. Overview

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,169 registered psychiatric nurses who resided in Alberta and were active members of the Registered Psychiatric Nurses Association of Alberta (RPNAA) on December 31, 1989.[1]

Registered psychiatric nurses located in the Census Metropolitan Areas of Calgary and Edmonton accounted for 61 percent of those registered with the RPNAA. The psychiatric nurse-to-population ratio was 1:2,073 in Alberta in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Registered Psychiatric Nurses Association of Alberta
#201, 9711-45 Avenue
Edmonton, Alberta
T6E 5V8

Executive Director: Mr. Tim Schultz
President: Mr. David Somers

b) Legislation:

Since January 1, 1988, registered psychiatric nurses have been regulated under the Health Disciplines Act. The Registered Psychiatric Nurses Association of Alberta is designated under the Act as the body responsible for registration of members and handling of complaints. Through regulations, the Health Disciplines Board sets the educational qualifications required for registration. The regulations also reserve the titles "psychiatric nurse" and "registered psychiatric nurse" for registered members.

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[1] Source: Registered Psychiatric Nurses Association of Alberta. Number of active psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1989.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	15	57,154	1:3,810
2 (Lethbridge)	30	115,903	1:3,863
3 (Pincher Creek)	32	36,307	1:1,135
4 (Hanna)	3	12,269	1:4,090
5 (Drumheller)	4	38,402	1:9,601
6 (Calgary excluding CMA)	5	47,611	1:9,522
7 (Stettler)	6	39,998	1:6,666
8 (Red Deer)	251	122,985	1:490
9 (Rocky Mountain House)	1	16,258	1:16,258
10 (Camrose)	42	77,103	1:1,836
11 (Edmonton excluding CMA)	3	19,464	1:6,488
12 (Bonnyville)	10	46,281	1:4,628
13 (Whitecourt)	6	55,957	1:9,326
14 (Hinton)	4	25,634	1:6,409
15 (Banff)	1	24, 37	1:24,737
16 (Fort McMurray)	6	46,082	1:7,680
17 (High Level)	2	49,473	1:24,737
18 (Grande Cache)	5	13,466	1:2,693
19 (Grande Prairie)	34	71,916	1:2,115
Census Metropolitan Area (CMA) of Calgary	173	702,270	1:4,059
Census Metropolitan Area (CMA) of Edmonton	536	803,730	1:1,499
PROVINCIAL TOTAL	**1,169**	**2,423,000**	**1:2,073**

1 Source: Registered Psychiatric Nurses Association of Alberta. Number of psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1989.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED PSYCHIATRIC NURSES, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	173	702,270	1:4,059
Census Metropolitan Area (CMA) of Edmonton	536	803,730	1:1,499
10,000 to 69,999			
Camrose	29	12,950	1:447
Fort McMurray	6	33,700	1:5,617
Grande Prairie	22	27,210	1:1,237
Lethbridge	25	60,610	1:2,424
Medicine Hat	11	42,790	1:3,890
Red Deer	44	55,950	1:1,272
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	2	5,470	1:2,735
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	4	6,670	1:1,668
Edson	2	7,370	1:3,685
High River	0	5,330	—
Hinton	1	9,890	1:9,890
Innisfail	3	5,650	1:1,883
Lacombe	17	6,190	1:364
Lloydminster	0	9,620	—
Okotoks	1	6,020	1:6,020
Olds	2	5,070	1:2,535
Peace River	6	6,500	1:1,083
Ponoka	172	5,710	1:33
Rocky Mountain House	1	5,340	1:5,340
Slave Lake	1	5,800	1:5,800
St. Paul	5	4,890	1:978
Stettler	0	4,990	—
Taber	1	6,270	1:6,270
Vegreville	2	4,990	1:2,495
Whitecourt	0	6,560	—
Under 5,000	103	539,320	1:5,236
PROVINCIAL TOTAL	**1,169**	**2,423,000**	**1:2,073**

1 Source: Registered Psychiatric Nurses Association of Alberta. Number of psychiatric nurses registered with the RPNAA and residing in Alberta as of December 31, 1989.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR REGISTERED PSYCHIATRIC NURSES IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel[1]	1,018	1,132	1,169
% Change in Number of Registered Personnel	–1.3%	11.2%	3.3%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:2,336	1:2,110	1:2,073

1 Source: Registered Psychiatric Nurses Association of Alberta. Number of psychiatric nurses registered with the RPNAA and residing in Alberta as of March 22, 1988, December 31, 1988 and 1989.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

Both Alberta Hospital, Edmonton and Alberta Hospital, Ponoka offer a two-year hospital-based psychiatric nursing diploma program. The two programs together produced 40 graduates in 1988-89. The program at Alberta Hospital, Edmonton will be discontinued in 1990, and training will be offered through alternate programs. Before students are eligible for registration, they must pass an examination approved by the Health Disciplines Board.

TABLE 3
EDUCATIONAL PROGRAMS FOR
REGISTERED PSYCHIATRIC NURSES IN ALBERTA[1]

	1986–87	1987–88	1988–89
PSYCHIATRIC NURSING DIPLOMA			
Alberta Hospital — Edmonton			
(Program Length: 2 years)			
Enrolments:			
1st Year	40	20	26
2nd Year	30	22	12
Graduates:	23	21	12
Alberta Hospital — Ponoka			
(Program Length: 2 years)			
Enrolments:			
1st Year	40	35	40
2nd Year	30	28	32
Graduates:	28	27	28
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	51	48	40

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Rehabilitation Practitioners

I. Overview

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residence, family support, vocation, social education, recreation/leisure or developmental day care.

(Source: Alberta Family and Social Services)

Since registration with the Alberta Association of Rehabilitation Practitioners is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as the source of workforce information.

There were 1,465 rehabilitation practitioners practising in Alberta in 1989.[1] Rehabilitation practitioners employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 60 percent of the total. Another 22 percent were located in Census Division 8 (Red Deer) where Michener Centre, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,654 in 1989.

II. Professional Association and Legislation Information

a) Licensing, Registration, or Certification Authority:

None.

b) Professional Association:

Alberta Association of Rehabilitation Practitioners
P.O. Box 386
Edmonton, Alberta
T5J 2J6

President: Ms. Deb Nolt

c) Legislation:

Rehabilitation practitioners have been designated to be regulated under the Health Disciplines Act; a Rehabilitation Practitioners Committee was established under this Act. Currently the government is re-evaluating the need to regulate this discipline.

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1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	24	57,154	1:2,381
2 (Lethbridge)	51	115,903	1:2,273
3 (Pincher Creek)	3	36,307	1:12,102
4 (Hanna)	3	12,269	1:4,090
5 (Drumheller)	4	38,402	1:9,601
6 (Calgary excluding CMA)	9	47,611	1:5,290
7 (Stettler)	9	39,998	1:4,444
8 (Red Deer)	326	122,985	1:377
9 (Rocky Mountain House)	12	16,258	1:1,355
10 (Camrose)	39	77,103	1:1,977
11 (Edmonton excluding CMA)	5	19,464	1:3,893
12 (Bonnyville)	10	46,281	1:4,628
13 (Whitecourt)	8	55,957	1:6,995
14 (Hinton)	2	25,634	1:12,817
15 (Banff)	0	24,737	—
16 (Fort McMurray)	6	46,082	1:7,680
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	73	71,916	1:985
Census Metropolitan Area (CMA) of Calgary	290	702,270	1:2,422
Census Metropolitan Area (CMA) of Edmonton	591	803,730	1:1,360
PROVINCIAL TOTAL	**1,465**	**2,423,000**	**1:1,654**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING REHABILITATION PRACTITIONERS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	290	702,270	1:2,422
Census Metropolitan Area (CMA) of Edmonton	591	803,730	1:1,360
10,000 to 69,999			
Camrose	5	12,950	1:2,590
Fort McMurray	4	33,700	1:8,425
Grande Prairie	71	27,210	1:383
Lethbridge	49	60,610	1:1,237
Medicine Hat	24	42,790	1:1,783
Red Deer	311	55,950	1:180
Wetaskiwin	5	10,480	1:2,096
5,000 to 9,999			
Bonnyville	6	5,470	1:912
Brooks	0	9,180	—
Crowsnest Pass	0	6,480	—
Drumheller	4	6,670	1:1,668
Edson	2	7,370	1:3,685
High River	0	5,330	—
Hinton	0	9,890	—
Innisfail	6	5,650	1:942
Lacombe	8	6,190	1:774
Lloydminster	17	9,620	1:566
Okotoks	0	6,020	—
Olds	9	5,070	1:563
Peace River	0	6,500	—
Ponoka	1	5,710	1:5,710
Rocky Mountain House	12	5,340	1:445
Slave Lake	0	5,800	—
St. Paul	4	4,890	1:1,223
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	12	4,990	1:416
Whitecourt	0	6,560	—
Under 5,000	34	539,320	1:15,862
PROVINCIAL TOTAL	**1,465**	**2,423,000**	**1:1,654**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
REHABILITATION PRACTITIONERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	1,548	1,350	1,465
% Change in Number of Practising Personnel	26.6%	–12.8%	8.5%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:1,536	1:1,769	1:1,654

IV. Educational Programs

Training in rehabilitative services is offered in one-year certificate programs, two-year diploma programs, and a four-year baccalaureate program. Alberta Vocational Centre — Lac La Biche, Grande Prairie Regional College and Medicine Hat College offer certificate programs of approximately one year in length. The diploma programs are offered at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College and Red Deer College; the baccalaureate program is offered at the University of Calgary. In the 1988-89 academic year the certificate, diploma and baccalaureate programs produced 31, 141 and one graduates, respectively.

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. CERTIFICATE PROGRAMS IN REHABILITATIVE SERVICES			
Alberta Vocational Centre — Lac La Biche			
(Program Length: 36 weeks)			
Enrolments:			
1st Year	12	15	9
Graduates:	8	10	8
Grande Prairie Regional College[2]			
(Program Length: 44 weeks)			
Enrolments:			
1st Year	19	21	13
Graduates:	7	11	8
Medicine Hat College			
(Program Length: 1 year)			
Enrolments:			
1st Year	32	23	21
Graduates:	11	9	12
Mount Royal College			
(Program Length: 1 year)			
Enrolments:[3]	64	56	77
Graduates:	—	—	3
PROVINCIAL TOTAL			
Number of Certificate Training Programs:	4		
Graduates:	26	30	31
B. DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College			
(Program Length: 2 years)			
Enrolments:			
1st Year	37	102	42
2nd Year	39	28	35
Graduates:	39	28	32

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1988.

2 This program commenced in 1986-87.

3 Enrolment figures include both students registered in the certificate program and students registered in the diploma program.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
Lethbridge Community College (Program Length: 2 years)			
Enrolments:			
1st Year	32	28	29
2nd Year	28	25	27
Graduates:	13	8	13
Mount Royal College (Program Length: 2 Years)			
Enrolments:[2]			
1st Year	64	56	77
2nd Year	50	54	58
Graduates:	39	30	60
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	49	52	53
2nd Year	35	34	35
Graduates:	29	24	36
PROVINCIAL TOTAL Number of Diploma Training Programs: 4			
Graduates:	120	90	141
C. BACCALAUREATE PROGRAM IN REHABILITATION EDUCATION[3]			
University of Calgary (Program Length: 4 years)			
Enrolments:			
1st Year	6	4	—
2nd, 3rd and 4th Years Combined	—	5	17
Graduates:	1	1	1

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Enrolment figures include both students registered in the certificate program and students registered in the diploma program.

3 Alberta Department of Advanced Education. Number of students enrolled in and graduated from Rehabilitation Education program (University of Calgary), 1986-87 through 1988-89.

Respiratory Therapists

I. Overview

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospital personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa Ontario: Employment and Immigration Canada, 1980)

Respiratory therapists have been regulated under the Health Disciplines Act since 1986. In April 1989 the regulatory responsibility for the discipline was transferred to the Alberta Society of Respiratory Therapists (ASRT). Therefore, registration data from the ASRT is used as the source of workforce information.

There were 566 respiratory therapists registered with the Alberta Society of Respiratory Therapists in 1989.[1] Respiratory therapists in the Census Metropolitan Areas of Calgary and Edmonton accounted for 82 percent of the total. The number of respiratory therapists registered in Alberta increased by 23.8 percent between 1987 and 1989. During the same period the provincial population grew by 1.9 percent. The provincial personnel-to-population ratio was 1:4,281 in 1989.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Society of Respiratory Therapists
#205, 4500 – 16 Avenue N.W.
Calgary, Alberta
T3B 0M6

President: Mr. Douglas Rodgers
Registrar: Ms. Jane Seaver

b) Legislation:

Respiratory therapists have been regulated under the Health Disciplines Act since March 31, 1986. The Alberta Society of Respiratory Therapists is responsible for registration and discipline of practitioners. Educational qualifications have been set by the Board in regulation.

The titles "registered respiratory therapist" and "registered respiratory technologist" are reserved by regulation for registered members.

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1 Source: Alberta Society of Respiratory Therapists. Number of active respiratory therapists registered with the ASRT and residing in Alberta as of May 1, 1990.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	12	57,154	1:4,763
2 (Lethbridge)	22	115,903	1:5,268
3 (Pincher Creek)	3	36,307	1:12,102
4 (Hanna)	0	12,269	—
5 (Drumheller)	1	38,402	1:38,402
6 (Calgary excluding CMA)	5	47,611	1:9,522
7 (Stettler)	0	39,998	—
8 (Red Deer)	26	122,985	1:4,730
9 (Rocky Mountain House)	0	16,258	—
10 (Camrose)	6	77,103	1:12,851
11 (Edmonton excluding CMA)	0	19,464	—
12 (Bonnyville)	4	46,281	1:11,570
13 (Whitecourt)	4	55,957	1:13,989
14 (Hinton)	0	25,634	—
15 (Banff)	2	24,737	1:12,369
16 (Fort McMurray)	6	46,082	1:7,680
17 (High Level)	0	49,473	—
18 (Grande Cache)	0	13,466	—
19 (Grande Prairie)	11	71,916	1:6,538
Census Metropolitan Area (CMA) of Calgary	202	702,270	1:3,477
Census Metropolitan Area (CMA) of Edmonton	262	803,730	1:3,068
PROVINCIAL TOTAL	**566**	**2,423,000**	**1:4,281**

1 Source: Alberta Society of Respiratory Therapists. Number of active respiratory therapists registered with the ASRT and residing in Alberta as of May 1, 1990.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF REGISTERED RESPIRATORY THERAPISTS, ALBERTA, 1989

Community by Population Size	Number Registered[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	202	702,270	1:3,477
Census Metropolitan Area (CMA) of Edmonton	262	803,730	1:3,068
10,000 to 69,999			
Camrose	3	12,950	1:4,317
Fort McMurray	6	33,700	1:5,617
Grande Prairie	10	27,210	1:2,721
Lethbridge	21	60,610	1:2,886
Medicine Hat	12	42,790	1:3,566
Red Deer	21	55,950	1:2,664
Wetaskiwin	0	10,480	—
5,000 to 9,999			
Bonnyville	0	5,470	—
Brooks	0	9,180	—
Crowsnest Pass	1	6,480	1:6,480
Drumheller	0	6,670	—
Edson	0	7,370	—
High River	1	5,330	1:5,330
Hinton	0	9,890	—
Innisfail	0	5,650	—
Lacombe	1	6,190	1:6,190
Lloydminster	1	9,620	1:9,620
Okotoks	2	6,020	1:3,010
Olds	0	5,070	—
Peace River	0	6,500	—
Ponoka	0	5,710	—
Rocky Mountain House	0	5,340	—
Slave Lake	0	5,800	—
St. Paul	3	4,890	1:1,630
Stettler	0	4,990	—
Taber	0	6,270	—
Vegreville	0	4,990	—
Whitecourt	0	6,560	—
Under 5,000	20	539,320	1:26,966
PROVINCIAL TOTAL	**566**	**2,423,000**	**1:4,281**

1 Source: Alberta Society of Respiratory Therapists. Number of active respiratory therapists registered with the ASRT and residing in Alberta as of May 1, 1990.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR RESPIRATORY THERAPISTS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Registered Personnel	457[1]	478[1]	566[2]
% Change in Number of Registered Personnel	15.1%	4.6%	18.4%
Population (Alberta)[3]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios:			
– Alberta	1:5,203	1:4,997	1:4,281

1 Source: Respiratory Therapists Committee, Alberta Health Disciplines Board. Number of respiratory therapists registered with the Committee and residing in Alberta as of December 31 of the indicated year.

2 Source: Alberta Society of Respiratory Therapists. Number of active respiratory therapists registered with the ASRT and residing in Alberta as of May 1, 1990.

3 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

IV. Educational Programs

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology each offer a two-year respiratory therapy diploma program. There were 60 graduates from the two programs in 1988-89.

TABLE 3
EDUCATIONAL PROGRAMS FOR
RESPIRATORY THERAPISTS IN ALBERTA[1]

	1986–87	1987–88	1988–89
DIPLOMA PROGRAM IN RESPIRATORY THERAPY			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	43	41	41
2nd Year	32	38	36
Graduates:	30	35	37
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	29	26	26
2nd Year	27	29	26
Graduates:	21	25	23
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	51	60	60

[1] Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

Social Workers

I. Overview

Definition: Counsel and aid individuals and families to understand and resolve their personal and social problems. Interview clients with problems, such as personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secure information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluate information obtained and assess client's capacities. Determine type of assistance required, counsel client regarding plans for meeting needs, and assist client to mobilize his inner capacities and environmental resources to improve social functioning. Aid client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refer client to community agencies and other organizations and arrange for provision of appropriate assistance, such as financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follow progress of client after immediate problems have been overcome, and compile case records and prepare reports. May secure supplementary information such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: **Canadian Classification and Dictionary of Occupations**. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of December 31, 1989 the Alberta Association of Social Workers had 1,306 registered members of which 924 resided in Alberta and had full practice rights.[1] Since membership in the Association is not mandatory, the survey of health and social service personnel working in Alberta conducted on March 31, 1989 by the Alberta Health and Social Services Disciplines Committee, was used as an alternative source of workforce information.

The survey found that there were 2,905 social workers practising in Alberta in 1989.[2] Social workers employed in the Census Metropolitan Areas of Calgary and Edmonton accounted for 64 percent of those employed. The number of social workers registered in Alberta increased by 18.9 percent between 1987 and 1989. During the same period the provincial population grew by 1.9 percent. The provincial social worker-to-population ratio was 1:834 in 1989.

1 Source: Alberta Association of Social Workers. Number of registered members as of December 31, 1989.

2 Source: **Health and Social Service Personnel Working in Alberta, March 31, 1989**, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

II. Professional Association and Legislation Information

a) Professional Association/Registration Body:

Alberta Association of Social Workers
#100, 11831 – 123 Street
Edmonton, Alberta
T5L 0G7

Executive Director/Registrar: Mr. Mark Nicoll
President: Mr. Gerald Mertick

b) Legislation:

Under the authority of the Social Workers Act, all individuals who wish to use the title of "registered social worker" must register with the Alberta Association of Social Workers (AASW). However, registration is not mandatory in order to practise in the province. In addition to registration responsibilities, the Association has the power to discipline its members. The Universities Coordinating Council evaluates academic qualifications of applicants trained outside of Alberta and sets examinations for registration purposes.

III. Personnel Data

TABLE 1A
GEOGRAPHIC DISTRIBUTION OF
PRACTISING SOCIAL WORKERS, ALBERTA, 1989

Census Division (Major Urban Centre)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	52	57,154	1:1,099
2 (Lethbridge)	158	115,903	1:734
3 (Pincher Creek)	11	36,307	1:3,301
4 (Hanna)	9	12,269	1:1,363
5 (Drumheller)	26	38,402	1:1,477
6 (Calgary excluding CMA)	11	47,611	1:4,328
7 (Stettler)	15	39,998	1:2,667
8 (Red Deer)	133	122,985	1:925
9 (Rocky Mountain House)	13	16,258	1:1,251
10 (Camrose)	57	77,103	1:1,353
11 (Edmonton excluding CMA)	21	19,464	1:927
12 (Bonnyville)	52	46,281	1:890
13 (Whitecourt)	49	55,957	1:1,142
14 (Hinton)	22	25,634	1:1,165
15 (Banff)	14	24,737	1:1,767
16 (Fort McMurray)	79	46,082	1:583
17 (High Level)	101	49,473	1:490
18 (Grande Cache)	3	13,466	1:4,489
19 (Grande Prairie)	223	71,916	1:322
Census Metropolitan Area (CMA) of Calgary	851	702,270	1:825
Census Metropolitan Area (CMA) of Edmonton	1,005	803,730	1:800
PROVINCIAL TOTAL	**2,905**	**2,423,000**	**1:834**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: Estimates of population in Alberta as of June 1, 1989 — Alberta Bureau of Statistics, 1990.

TABLE 1B
COMMUNITY BREAKDOWN OF PRACTISING SOCIAL WORKERS, ALBERTA, 1989

Community by Population Size	Number Practising[1]	1989 Population[2]	Personnel-to-Population Ratio
70,000 and Over			
Census Metropolitan Area (CMA) of Calgary	851	702,270	1:825
Census Metropolitan Area (CMA) of Edmonton	1,005	803,730	1:800
10,000 to 69,999			
Camrose	30	12,950	1:432
Fort McMurray	27	33,700	1:1,248
Grande Prairie	76	27,210	1:358
Lethbridge	125	60,610	1:485
Medicine Hat	52	42,790	1:823
Red Deer	95	55,950	1:589
Wetaskiwin	16	10,480	1:655
5,000 to 9,999			
Bonnyville	27	5,470	1:203
Brooks	6	9,180	1:1,530
Crowsnest Pass	8	6,480	1:810
Drumheller	18	6,670	1:371
Edson	9	7,370	1:819
High River	0	5,330	—
Hinton	13	9,890	1:761
Innisfail	13	5,650	1:435
Lacombe	2	6,190	1:3,095
Lloydminster	9	9,620	1:1,069
Okotoks	1	6,020	1:6,020
Olds	10	5,070	1:507
Peace River	34	6,500	1:191
Ponoka	17	5,710	1:336
Rocky Mountain House	13	5,340	1:411
Slave Lake	18	5,800	1:322
St. Paul	17	4,890	1:288
Stettler	5	4,990	1:998
Taber	8	6,270	1:784
Vegreville	16	4,990	1:312
Whitecourt	11	6,560	1:596
Under 5,000	373	539,320	1:1,446
PROVINCIAL TOTAL	**2,905**	**2,423,000**	**1:834**

1 Source: **Health and Social Service Personnel Working in Alberta**, March 31, 1989, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: For those communities which did not carry out a census, the population estimates are experimental results derived from the Alberta Bureau of Statistics small area population model, which is still in development. The Bureau estimates may differ from the official population figures compiled by Alberta Municipal Affairs.

TABLE 2
SELECTED WORKFORCE STATISTICS FOR
SOCIAL WORKERS IN ALBERTA, 1987, 1988, AND 1989

	1987	1988	1989
Number of Practising Personnel[1]	2,443	2,585	2,905
% Change in Number of Practising Personnel	13.4%	5.8%	12.4%
Population (Alberta)[2]	2,377,700	2,388,700	2,423,000
% Change in Population	0.1%	0.5%	1.2%
Personnel-to-Population Ratios: – Alberta	1:973	1:926	1:834

IV. Educational Programs

The University of Calgary offers both a four-year Bachelor of Social Work (BSW) program and a 12 to 18 month Master of Social Work (MSW) program. In 1988-89, the BSW and MSW programs produced 151 and 32 graduates, respectively.

Divisions of the Faculty of Social Work of the University of Calgary are located in Edmonton and in Lethbridge. Both the Edmonton and Lethbridge Divisions offer the full first professional degree (Bachelor of Social Work). Social work courses are offered in various locations throughout the province, either through on-site faculty instruction or through the University of Calgary teleconferencing network.

In addition, there are diploma programs in social services available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. These programs produced a total of 162 graduates in 1988-89. There is also a community social service certificate and diploma offered by Alberta Vocational Centre — Lac La Biche. In the 1988-89 academic year these programs produced eight and five graduates, respectively.

1 Sources: **Health and Social Service Personnel Working in Alberta**, March 31, 1987, 1988 and 1989 editions, Alberta Health and Social Services Disciplines Committee, Edmonton, Alberta.

2 Source: **Alberta Population Growth, Fourth Quarter, 1989**. Revised June 1 population estimates, Alberta Bureau of Statistics, July 1990.

TABLE 3
EDUCATIONAL PROGRAMS FOR
SOCIAL WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Grant MacEwan Community College			
(Program Length: 2 years)			
Enrolments:[2]			
1st Year	145	145	179
2nd Year	114	150	100
Graduates:	82	101	87
Mount Royal College			
(Program Length: 2 years)			
Enrolments:			
1st Year	145	137	141
2nd Year	81	94	80
Graduates:	65	67	48
Red Deer College			
(Program Length: 2 years)			
Enrolments:			
1st Year	30	30	30
2nd Year	22	31	30
Graduates:	22	25	27
B. COMMUNITY SOCIAL SERVICE CERTIFICATE/DIPLOMA			
Alberta Vocational Centre — Lac La Biche			
Program Length: (Certificate: 1 Year)			
(Diploma: 2 Years)			
Enrolments:[3]			
1st Year	18	15	13
2nd Year	9	9	7
Graduates:			
Certificate	12	8	8
Diploma	6	8	5
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 4			
Graduates:	175	201	167

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 Enrolment and graduate data include part-time evening and full-time outreach data from the Grouard and the Yellowhead Tribal Council programs.

3 Enrolment data includes figures for the Slave Lake outreach program.

TABLE 3 continued
EDUCATIONAL PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1986–87	1987–88	1988–89
C. BACCALAUREATE PROGRAM			
University of Calgary			
Bachelor of Social Work			
(Program Length: 4 years)			
Enrolments:[2]			
1st Year	14	2	2
2nd Year	68	60	51
3rd Year	207	200	206
4th Year	152	117	169
Graduates:	144	149	151
D. MASTER'S PROGRAM			
University of Calgary			
Master of Social Work			
(Program Length: 12-18 months)[3]			
Enrolments:			
1st Year	44	49	45
Graduates:	49	46	32

1 Source: **Alberta Health and Social Service Education Programs Inventory**. Edmonton, Alberta: Department of Advanced Education, December 1989.

2 The Faculty of Social Work admits students from other faculties into the third year of the BSW program. This accounts for the discrepancy between the enrolment figures for the second year and the third year of the program.

3 The MSW program is one year in length following a BSW degree. Students with an undergraduate degree other than a BSW degree may be admitted to a two-year program.